Ed. 009 12 - 12

NEW EXCALIBUR

ELECTRIC PISTON PUMP

OPERATING AND MAINTENANCE INSTRUCTION

FRAME mounted

TROLLEY mounted

TOP FINISH version

LARIUS®

PAINT SPRAYING EQUIPMENT

ENGLISH

Due to a constant product improvement programme, the factory reserves the right to modify technical details mentioned in this manual without prior notice.

This manual is to be considered as an English language translation of the original manual in Italian. The manufacturer shall bear no responsibility for any damages or inconveniences that may arise due to the incorrect translation of the instructions contained within the original manual in Italian.

English

ELECTRIC PISTON PUMP

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WE ADVISE THE USE OF THIS EQUIPMENT ONLY BY PROFESSIONAL OPERATORS.
ONLY USE THIS MACHINE FOR USAGE SPECIFICALLY MENTIONED IN THIS MANUAL.

Thank you for choosing a **LARIUS S.R.L.** product.
As well as the product purchased,
you will receive a range of support services
enabling you to achieve the results desired,
quickly and professionally.

English

WARNINGS

The table below provides the meaning of the symbols used in this manual in relation to using, earthing, operating, maintaining, and repairing of this equipment.

	Read this operator's manual carefully before using the equipment. An improper use of this machine can cause injuries to people or things. Do not use this machine when under the influence of drugs or alcohol. Do not modify the equipment under any circumstances. Use products and solvents that are compatible with the various parts of the equipment, and read the manufacturer's warnings carefully. See the Technical Details for the equipment given in the Manual. Check the equipment for worn parts once a day. If any worn parts are found, replace them using ONLY original spare parts. Keep children and animals away from work area. Comply with all safety standards.
	It indicates an accident risk or serious damage to equipment if this warning is not followed.
	It indicates a fire or explosion risk if this warning is not followed. Eliminate all ignition sources such as pilot lights, cigarettes, portable electric lamps and plastic drop cloths. Keep work area free of debris. ONLY use this equipment in a well ventilated area. EARTH ALL THE EQUIPMENT LOCATED IN THE WORK AREA. Do not form connections or switch light switches on or off if the air contains inflammable fumes. If electrical shocks or discharges are encountered the operation being carried out using the equipment **must be stopped immediately**. Keep a fire extinguisher at hand in the immediate vicinity of the work area.
	It indicates wound and finger squashing risk due to movable parts in the equipment. Tenersi lontano dalle parti in movimento. Do not use the equipment without the proper protection. Before any inspection or maintenance of the equipment, carry out the decompression procedure explained in this manual, and prevent any risk of the equipment starting unexpectedly.
 	Report any risk of chemical reaction or explosion if this warning has not been given. There is a risk of injury or serious lesion related to contact with the jet from the spray gun. If this should occur, IMMEDIATELY contact a doctor, indicating the type of product injected. Do not spray before the guard has been placed over the nozzle and the trigger on the spray gun. Do not put your fingers in the spray gun nozzle. Once work has been completed, before carrying out any maintenance, complete the decompression procedure explained in this manual.
	It indicates important recommendations about disposal and recycling process of products in accordance with the environmental regulations.
	Report any danger of electric shock if the warning and presence of live electrical parts has not been indicated. Store in a dry place and do not expose to the rain. Check that the cables are in good condition. Switch off the equipment and discharge any electricity before cleaning or maintaining the equipment.
	Mark any clamps attached to earth cables. Use ONLY 3-wire extension cords and grounded electrical outlets. Before starting work make sure that the electrical system is earthed and that it complies with safety standards.
	It is obligatory to wear suitable clothing as gloves, goggles and face shield. Wear clothing that complies with the safety standards in force in the country in which the equipment is used. Do not wear bracelets, earrings, rings, chains, or anything else that may hinder the operator's work. Do not wear clothing with wide sleeves, scarves, ties, or any other piece of clothing that could get tangled up in moving parts of the equipment during the work, inspection, or maintenance cycles.

English

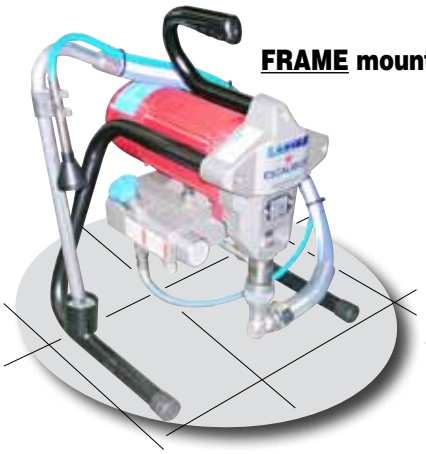
A WORKING PRINCIPLE

The ***NEW J11 EXCALIBUR*** unit is defined "electric piston pump".
An electric piston pump is used for high pressure painting without air *(from this process derives the term "airless").*
The pump is controlled by an electric motor coupled with a reduction gear.
A cam shaft and a connecting rod allow to obtain the reciprocating motion necessary to the working of the "pumping group" piston.
The piston movement produces a "vacuum".
The product is sucked, pushed towards the pump outlet and then sent to the gun through the flexible hose.
A electronical device on the side of the reduction gear casing, allows to adjust and control the pressure of the material coming out of the pump.
When the pump reaches the set value, the motor stops and starts again when the value decreases.
A safety valve avoiding overpressure, guarantees the total reliability of the equipment.

"Top Finish" version.

"Top Finish" version allows to choose between *Airless* and *Mistless painting.*
The machine works with basic system Mistless and to choose the airless system it is necessary to close the air supply and replace the type of spraying gun.

FRAME mounted



TROLLEY mounted

TOP FINISH version

Fields of application	*Applications materials*	
Indoor	Lacquer	Paints
Outdoor	Waterborne	Emulsions
Industrial buildings	Acrylic	Impregnants
Industrial constructions	Primer	Antirust
Redeveloping	Enamels	Primer
Roofing	Fixative	

B TECHNICAL DATA

NEW EXCALIBUR	Frame mounted	Trolley mounted	Top Finish version
SUPPLY (single-phase)*	230Vac - 50Hz	230Vac - 50Hz	230Vac - 50Hz
RUN GENERATOR SUPPLY	minimum 4Kw asynchronous	minimum 4Kw asynchronous	minimum 4Kw asynchronous
MOTOR POWER	0,75 kW	0,75 kW	0,75 kW
MAX. WORKING PRESSURE	210 bar	210 bar	210 bar
MAX. DELIVERY	2,1 L/min	2,1 L/min	2,1 L/min
MATERIAL OUTLET	M16 x 1,5 (M)	M16 x 1,5 (M)	M16 x 1,5 (M)
MAX DIM. OF THE GUN NOZZLE	0,023”	0,023”	0,023”
WEIGHT	17 Kg	18 Kg	65 Kg
LEVEL OF THE SOUND PRESSURE	≤ 80dB(A)	≤ 80dB(A)	≤ 80dB(A)
LENGTH	(**A**) 450 mm	(**A**) 580 mm	(**A**) xx mm
WIDTH	(**B**) 460 mm	(**B**) 540 mm	(**B**) xx mm
HEIGHT	(**C**) 550 mm	(**C**) 995 mm	(**C**) xx mm
HIGH PRESSURE MANOMETER	0-40 Mpa	0-40 Mpa	0-40 Mpa
GENERATOR MIN. REQUIREMENTS	4,0 Kw monophase	4,0 Kw monophase	9,0 Kw monophase
AIR COMPRESSOR	-	-	1Kw-1,4HP-230lt./min.
AIR TANK	-	-	5 lt.
AIR SPRAY REGULATOR	-	-	0 ÷ 4 bar

*Available on request with special voltages

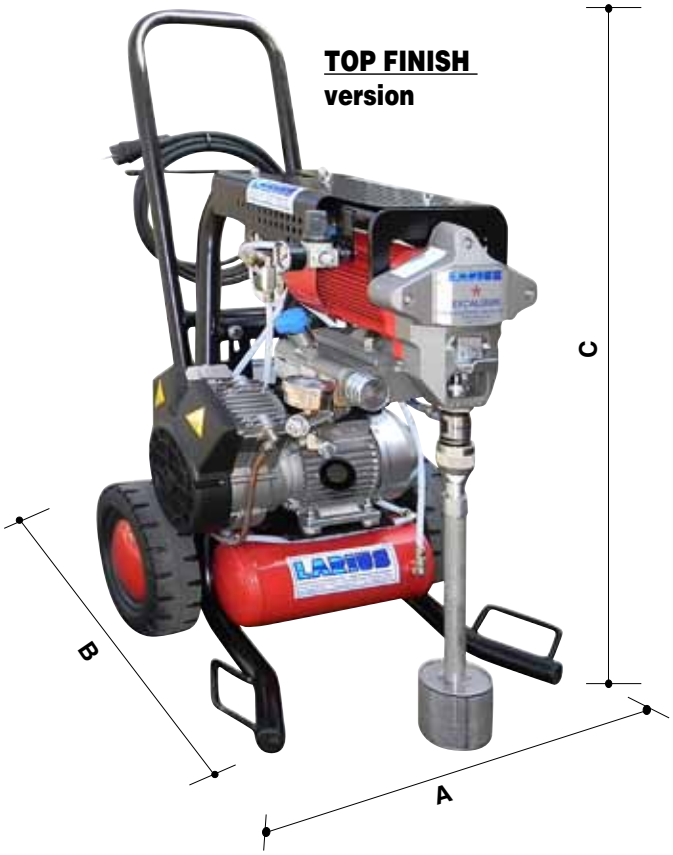
PARTS OF THE PUMP IN CONTACT WITH THE MATERIAL Stainless Steel AISI 420B, PTFE; Aluminium

English

FRAME mounted

TROLLEY mounted

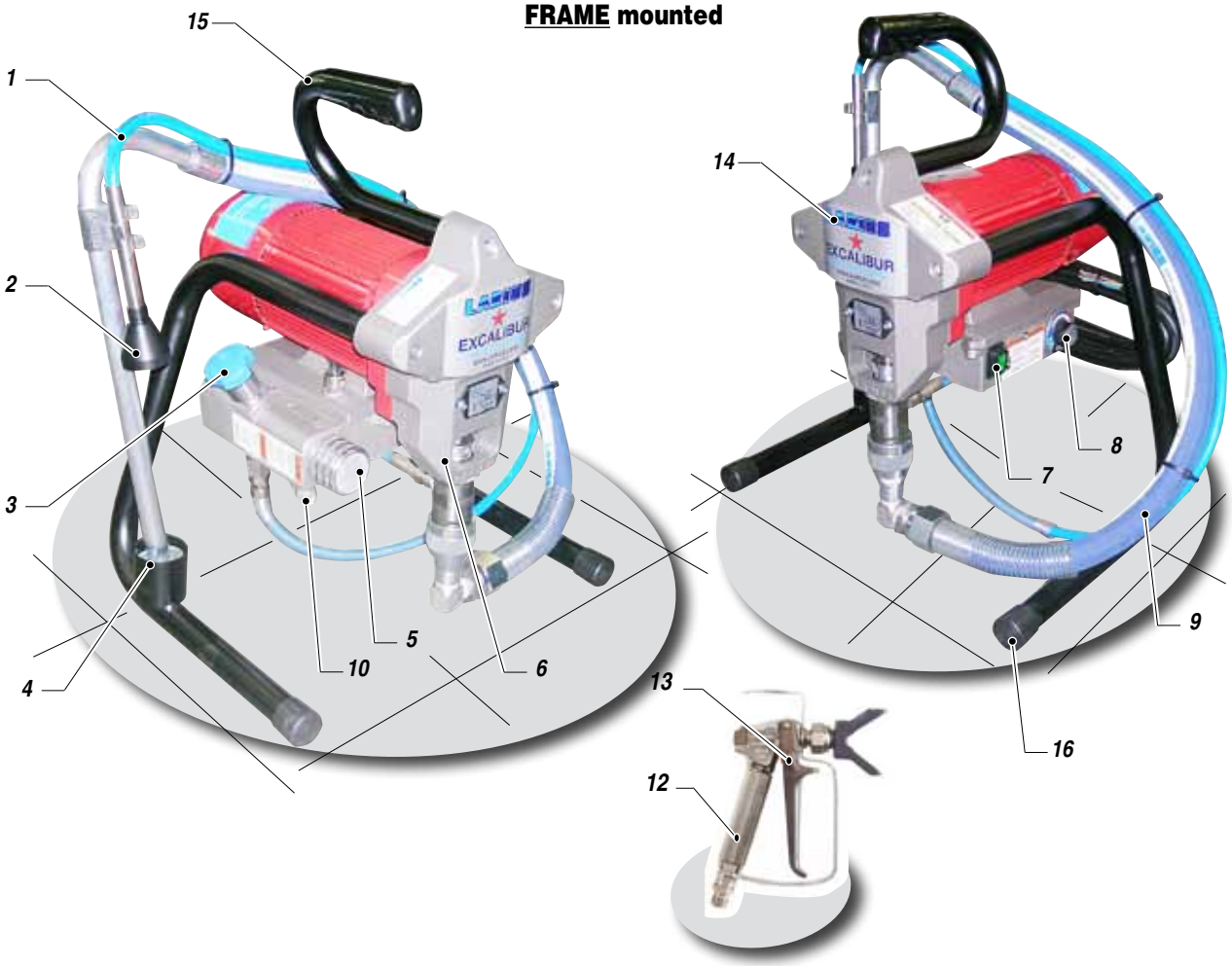
TOP FINISH version

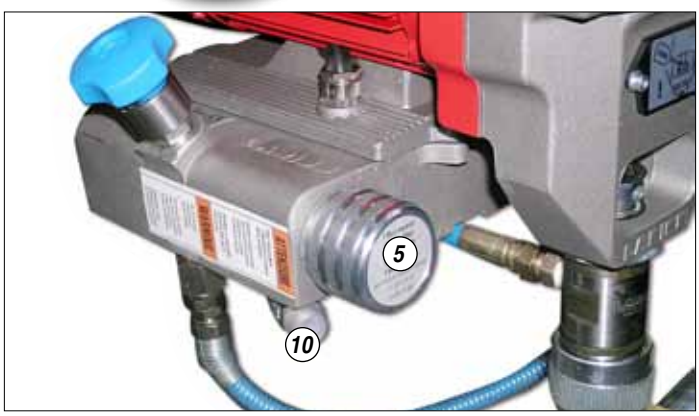


English

C DESCRIPTION OF THE EQUIPMENT

FRAME mounted





POS.	Description
1	Recirculation tube
2	Output product recirculation
3	Safety-recirculation valve
4	Suction filter
5	Plug filter
6	Pumping group
7	ON/OFFswitch
8	Potentiometer for adjusting the operating pressure

POS.	Description
9	Intake product pipe
10	Attack for product delivery
11	Indicator light alarms
12	Airless manual gun
13	Trigger safety clamp
14	Reduction box
15	Handle
16	Frame

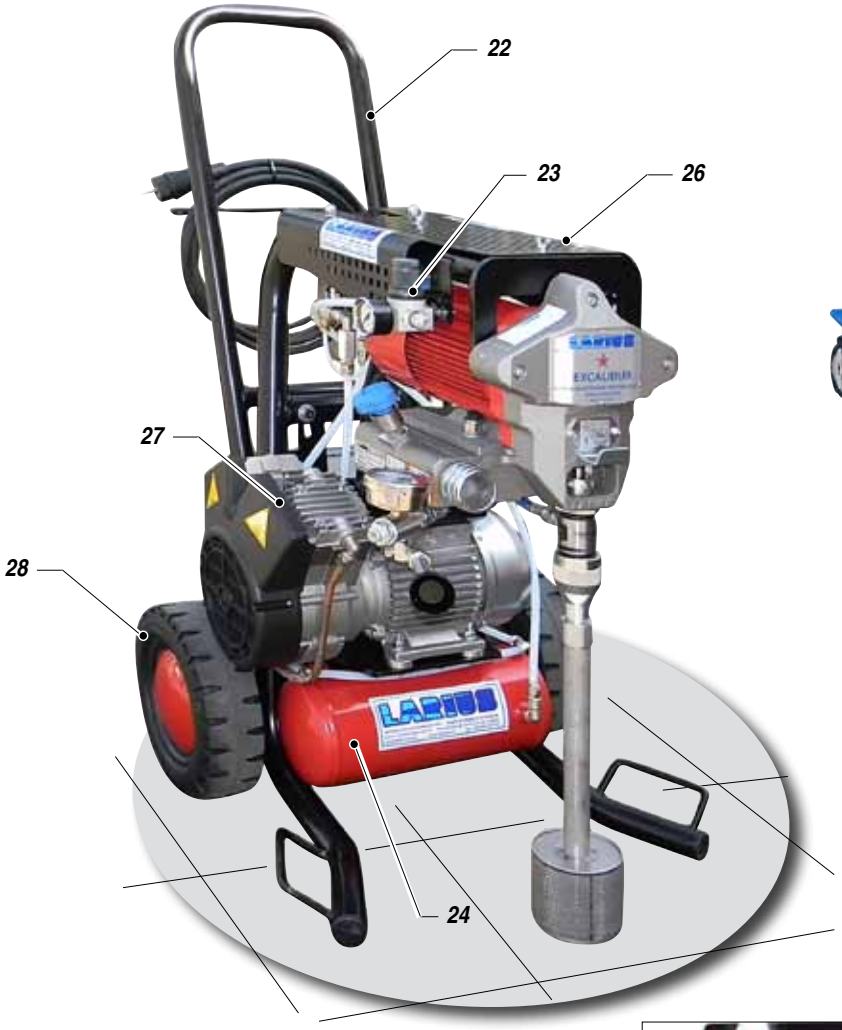
TROLLEY mounted

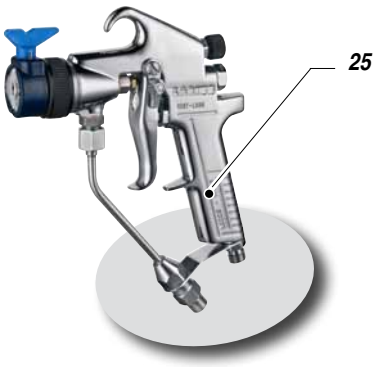
POS.	Description
17	Recirculation piping with fittings
18	Union
19	Dip hose

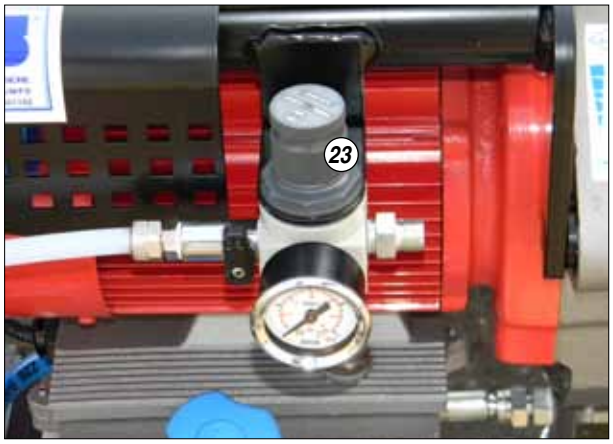
POS.	Description
20	Trolley
21	Wheel

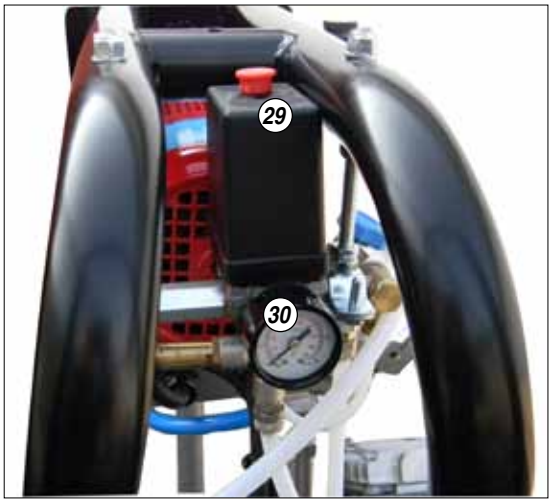
English

TOP FINISH version









POS.	Description
22	Version Top Finish
23	Air regulator
24	Air tank
25	Mist-less 09 hand gun
26	Carter

POS.	Description
27	Compressor unit
28	Wheels
29	Pressure switch
30	Manometer

9

D TRANSPORT AND UNPACKING

- The packed parts should be handled as indicated in the symbols and markings on the outside of the packing.
- Before installing the equipment, ensure that the area to be used is large enough for such purposes, is properly lit and has a clean, smooth floor surface.

The user is responsible for the operations of unloading and handling and should use the maximum care so as not to damage the individual parts or injure anyone.
To perform the unloading operation, use only qualified and trained personnel *(truck and crane operators, etc.)* and also suitable hoisting equipment for the weight of the installation or its parts.
Follow carefully all the safety rules.
The personnel must be equipped with the necessary safety clothing.

- The manufacturer will not be responsible for the unloading operations and transport to the workplace of the machine.
- Check the packing is undamaged on receipt of the equipment. Unpack the machine and verify if there has been any damage due to transportation.
  In case of damage, call immediately **LARIUS** and the Shipping Agent. All the notices about possible damage or anomalies must arrive timely within 8 days at least from the date of receipt of the plant through Registered Letter to the Shipping Agent and to **LARIUS**.

The disposal of packaging materials is a customer's competence and must be performed in accordance with the regulations in force in the country where the plant is installed and used.
It is nevertheless sound practice to recycle packaging materials in an environment-friendly manner as much as possible.

E SAFETY RULES

- THE EMPLOYER SHALL TRAIN ITS EMPLOYEES ABOUT ALL THOSE RISKS STEMMING FROM ACCIDENTS, ABOUT THE USE OF SAFETY DEVICES FOR THEIR OWN SAFETY AND ABOUT THE GENERAL RULES FOR ACCIDENT PREVENTION IN COMPLIANCE WITH INTERNATIONAL REGULATIONS AND WITH THE LAWS OF THE COUNTRY WHERE THE PLANT IS USED.
- THE BEHAVIOUR OF THE EMPLOYEES SHALL STRICTLY COMPLY WITH THE ACCIDENT PREVENTION AND ALSO ENVIRONMENTAL REGULATIONS IN FORCE IN THE COUNTRY WHERE THE PLANT IS INSTALLED AND USED.

Read carefully and entirely the following instructions before using the product. Please save these instructions in a safe place.

The unauthorised tampering/replacement of one or more parts composing the machine, the use of accessories, tools, expendable materials other than those recommended by the manufacturer can be a danger of accident.
The manufacturer will be relieved from tort and criminal liability.

- KEEP YOUR WORK PLACE CLEAN AND TIDY. DISORDER WHERE YOU ARE WORKING CREATES A POTENTIAL RISK OF ACCIDENTS.
- ALWAYS KEEP PROPER BALANCE AVOIDING UNUSUAL STANCE.
- BEFORE USING THE TOOL, ENSURE THERE ARE NOT DAMAGED PARTS AND THE MACHINE CAN WORK PROPERLY.
- ALWAYS FOLLOW THE INSTRUCTIONS ABOUT SAFETY AND THE REGULATIONS IN FORCE.
- KEEP THOSE WHO ARE NOT RESPONSIBLE FOR THE EQUIPMENT OUT OF THE WORK AREA.
- **NEVER** EXCEED THE MAXIMUM WORKING PRESSURE INDICATED.
- **NEVER** POINT THE SPRAY GUN AT YOURSELVES OR AT OTHER PEOPLE. THE CONTACT WITH THE CASTING CAN CAUSE SERIOUS INJURIES. IN CASE OF INJURIES CAUSED BY THE GUN CASTING, SEEK IMMEDIATE MEDICAL ADVICE SPECIFYING THE TYPE OF THE PRODUCT INJECTED. **NEVER** UNDERVALUE A WOUND CAUSED BY THE INJECTION OF A FLUID.
- ALWAYS DISCONNECT THE SUPPLY AND RELEASE THE PRESSURE IN THE CIRCUIT BEFORE PERFORMING ANY CHECK OR PART REPLACEMENT OF THE EQUIPMENT.
- NEVER MODIFY ANY PART IN THE EQUIPMENT. CHECK REGULARLY THE COMPONENTS OF THE SYSTEM. REPLACE THE PARTS DAMAGED OR WORN.

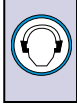
- TIGHTEN AND CHECK ALL THE FITTINGS FOR CONNECTION BETWEEN PUMP, FLEXIBLE HOSE AND SPRAY GUN BEFORE USING THE EQUIPMENT.
- ALWAYS USE THE FLEXIBLE HOSE SUPPLIED WITH STANDARD KIT. THE USE OF ANY ACCESSORIES OR TOOLING OTHER THAN THOSE RECOMMENDED IN THIS MANUAL, MAY CAUSE DAMAGE OR INJURE THE OPERATOR.
- THE FLUID CONTAINED IN THE FLEXIBLE HOSE CAN BE VERY DANGEROUS. HANDLE THE FLEXIBLE HOSE CAREFULLY. DO NOT PULL THE FLEXIBLE HOSE TO MOVE THE EQUIPMENT. NEVER USE A DAMAGED OR A REPAIRED FLEXIBLE HOSE.

The high speed of travel of the product in the hose can create static electricity through discharges and sparks.
It is suggested to earth the equipment.
The pump is earthed through the earth cable of the supply.
The gun is earthed through the high pressure flexible hose.
All the conductors near the work area must be earthed.

- NEVER SPRAY OVER FLAMMABLE PRODUCTS OR SOLVENTS IN CLOSED PLACES.
- NEVER USE THE TOOLING IN PRESENCE OF POTENTIALLY EXPLOSIVE GAS.

Always check the product is compatible with the materials composing the equipment *(pump, spray gun, flexible hose and accessories)* with which it can come into contact. Never use paints or solvents containing halogen hydrocarbons *(as the methylene chloride)*.
If these products come into contact with aluminium parts can provoke dangerous chemical reactions with risk of corrosion and explosion.

IF THE PRODUCT TO BE USED IS TOXIC, AVOID INHALATION AND CONTACT BY USING PROTECTION GLOVES, GOGGLES AND PROPER FACE SHIELDS.



TAKE PROPER SAFETY MEASURES FOR THE PROTECTION OF HEARING IN CASE OF WORK NEAR THE PLANT.

Electrical safety precautions

- Check the switch is on the "OFF" position before connecting the cable to the mains.
- Never carry a plugged-in equipment.
- Disconnect the equipment before storing it and before performing any maintenance operation or replacing of accessories.
- Do not carry the equipment neither unplug it by pulling the electric cable.
- Protect the cable from heat, oil and sharp edges.
- When the tool is used outdoors, use only an extension cable suited for outdoor use and so marked.

Never attempt to tamper with the calibre of instruments.

- Take care when the pumping rod is moving.
  Stop the machine whenever someone is within its vicinity.
- Repairs of the electrical equipment should only be carried out by skilled personnel, otherwise considerabledanger to the user may result.

CONDITIONS OF GUARANTEE

The conditions of guarantee do not apply in the following situations:
- improper washing and cleaning of components causing malfunction, wear or damage to the equipment or any of its parts;
- improper use of the equipment;
- use that does not conform with applicable national legislation;
- incorrect or faulty installation;
- modifications, interventions and maintenance that have not been authorised by the manufacturer;
- use of non-original spare parts or parts that do not correspond to the specific model;
- total or partial non-compliance with the instructions provided.

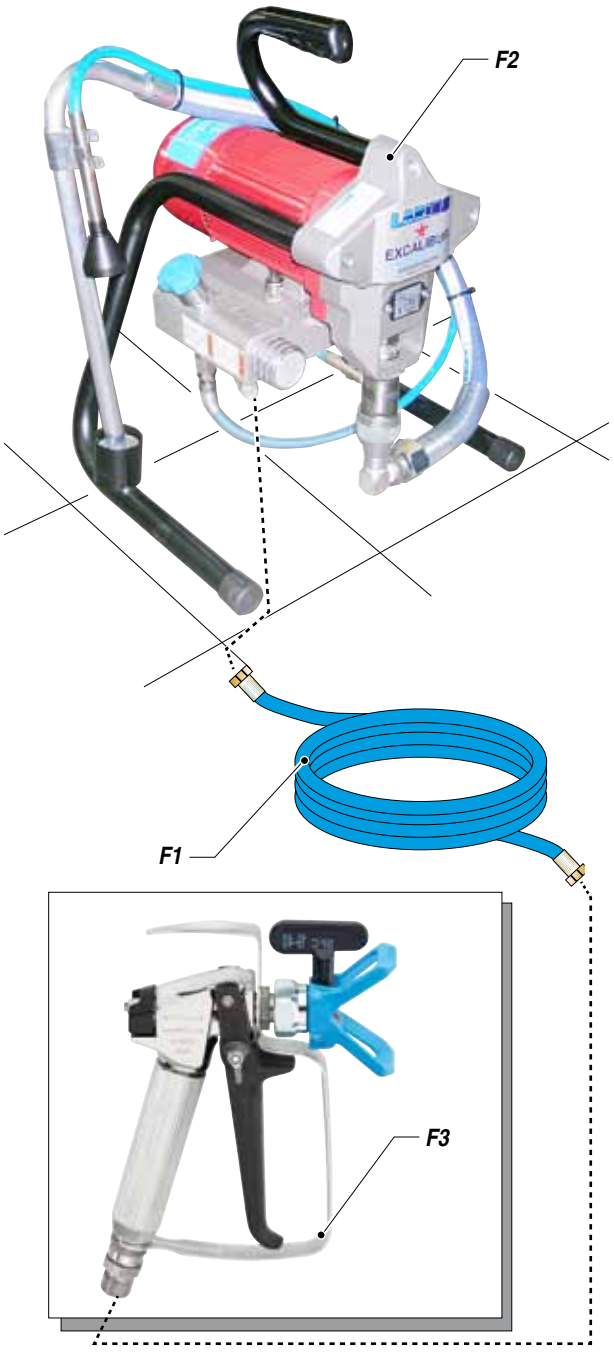
English

F SETTING-UP

CONNECTION OF THE FLEXIBLE HOSE TO THE GUN

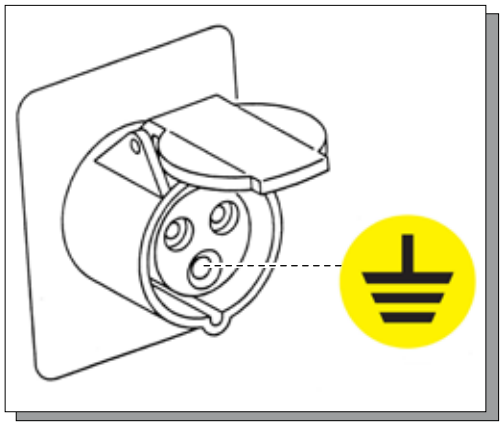
- Connect the high pressure flexible hose (**F1**) to the pump (**F2**) and to the gun (**F3**) ensuring to tighten the fittings *(the use of two wrenches is suggested)*.
  NEVER use sealants on fittings' threads.
  It is **ADVISED** to mount a high pressure manometer at the pump outlet *(see on page "Accessories")* to read the product pressure.

- It is recommended to use the hose provided with the standard kit *(ref. 18036)*.
  NEVER use a damaged or a repaired flexible hose.



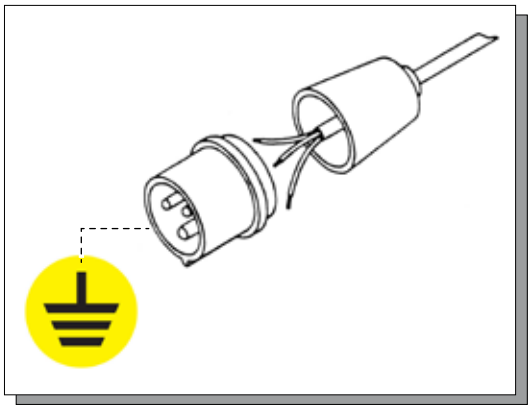
CHECK ON POWER SUPPLY

Make sure that the electrical system is earthed and complies with regulations.



- Check the mains voltage corresponds to the equipment's rating.

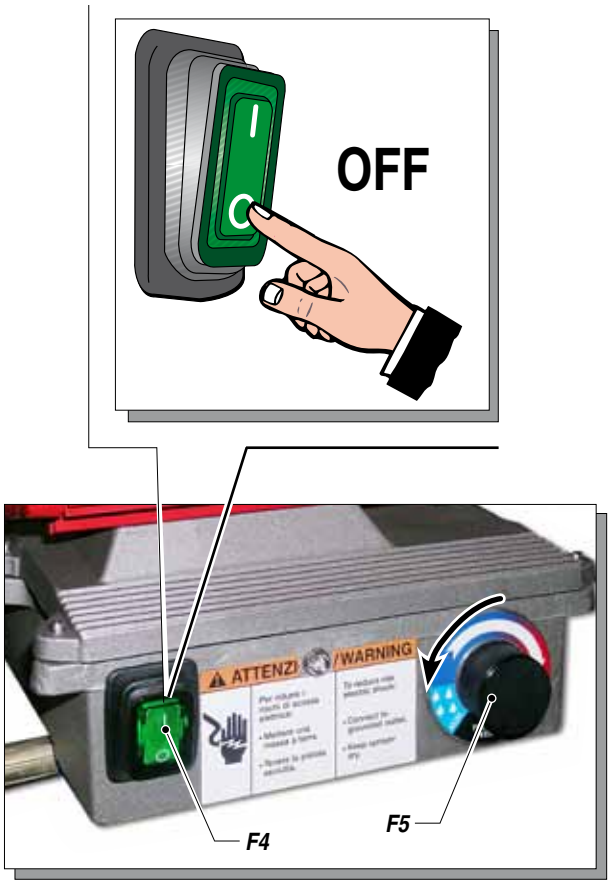
- The supply cable is provided without plug.
  Use a plug which guarantees the plant earthing.
  Only a technician or a skilled person should perform the connection of the plug to the electric cable.



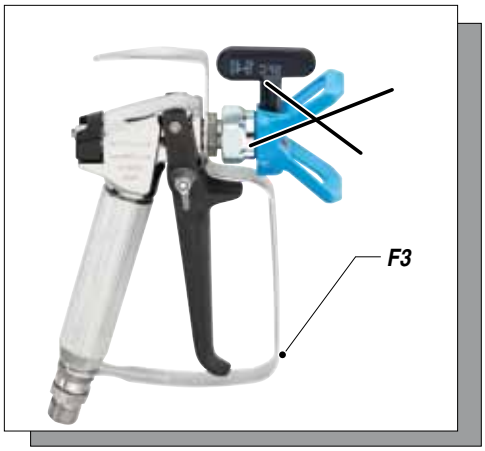
Should anyone use an extension cable between the tooling and the socket, it must have the same characteristics as the cable supplied *(minimum diameter of the wire 2.5 mm²)* with a maximum length of 50 mt. Higher lengths and lower diameters can provoke excessive voltage falls and also an anomalous working of the equipment

CONNECTION OF THE TOOLING TO THE POWER SUPPLY

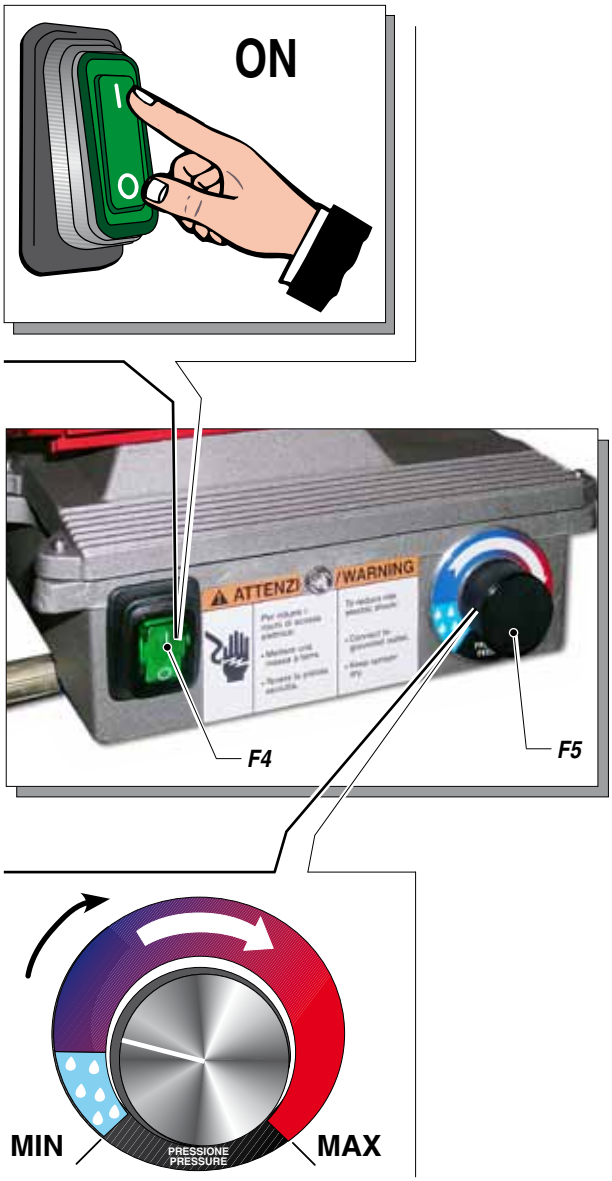
- Check the switch (**F4**) is on the "**OFF**" ***(0)*** position before connecting the cable to the mains.
- Place the pressure control knob (**F5**) on the "**MIN**" position *(turn counterclockwise)*.



- Ensure the gun (**F3**) is without nozzle.

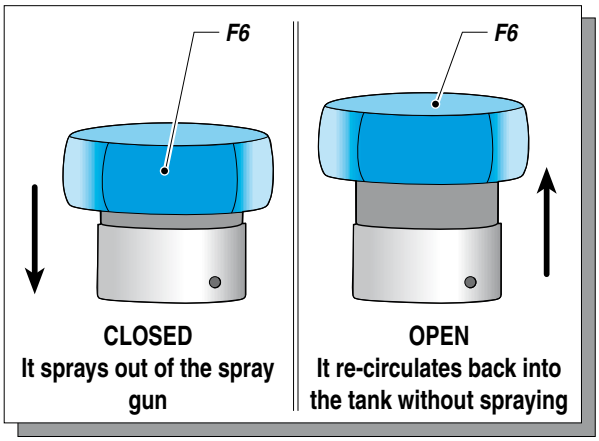


- Press the switch (**F4**) of the equipment "**ON**" ***(I)***.
- Turn clockwise the pressure control knob (**F5**) so as the machine works at idle speed.



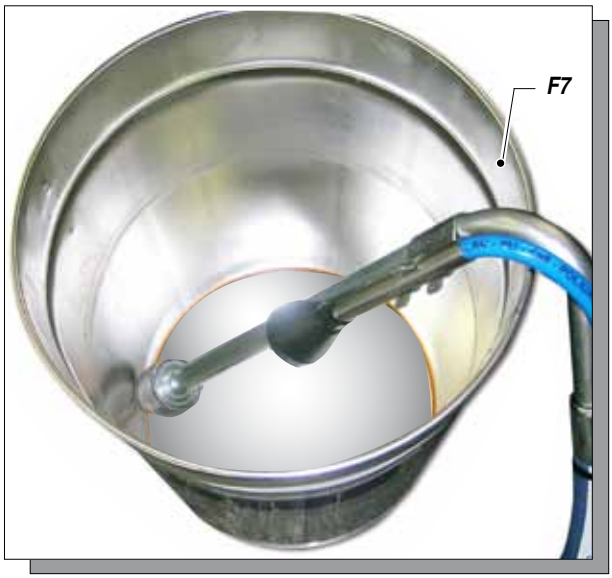
English

- Open the recirculating-safety valve (**F6**).



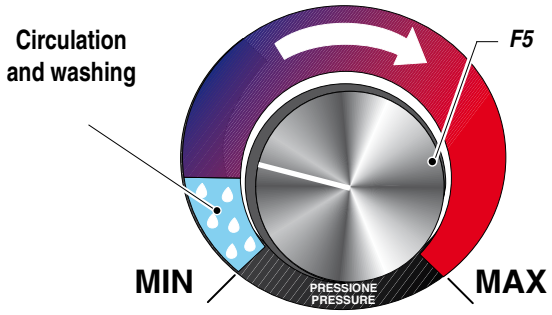
- Turn the pressure setting knob (**F5**) clockwise to the "CIRCULATION & WASHING" position *(drop symbol)*.

- Visually check that the wash fluid starts to re-circulate within the tank (**F7**).

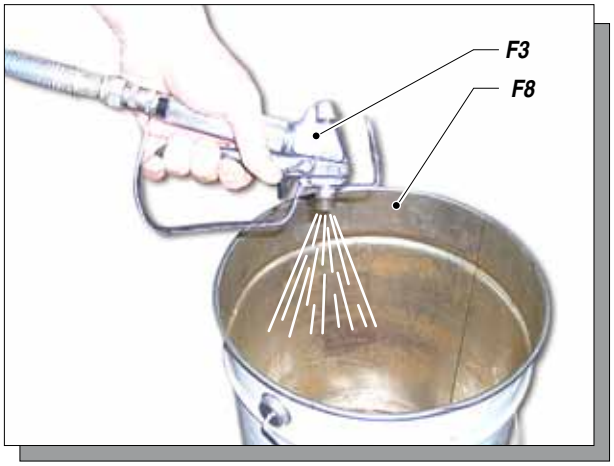


- Turn the pressure adjustment handle (**F5**) clockwise to stop the pump.
- Closed the recirculating-safety valve (**F6**).

- Turn pressure regulating knob (**F5**) clockwise a little so that the machine idles.



- Point the gun (**F3**) into a container (**F8**) keeping the trigger pressed *(so as to drain the oil inside)* till a clean solvent comes out. Now, release the trigger.



- Remove the suction pipe and take away the solvent tank.
- Point the gun into the solvent tank and press the trigger so as to recover the residual solvent.
- As the pump idles, press the "**OFF**" ***(0)*** switch to stop the tooling.

Absolutely avoid to spray solvents indoors. In addition, it is recommended to keep away from the pump in order to avoid the contact between the solvent fumes and the electric motor.

- Now the machine is ready. Should you use water paints, besides the solvent wash, a wash with soapy and then clean water is suggested.
- Insert the gun trigger lock and assemble the nozzle.

PREPARATION OF THE PAINT

- Make sure the product is suitable to be used with a spray gun.
- Mix and filter the product before using it. For filtration, use **CLOSE-MESH** *(ref. 214)* and **LARGE-MESH** *(ref.215)* **LARIUS METEX** braids.

Make sure the product to be used is compatible with the materials employed for manufacturing the equipment *(stainless steel and aluminium).* Because of that, please contact the supplier of the product.

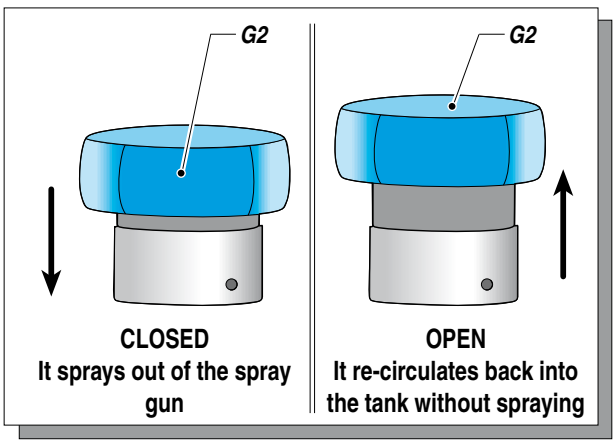
Never use products containing halogen hydrocarbons *(as methylene chloride)*. If these products come into contact with aluminium parts of the equipment, can provoke dangerous chemical reactions with risk of explosion.

G WORKING

START OF THE PAINTING OPERATIONS

- Use the tooling after performing all the **SETTING UP** operations above described.
- Dip the suction pipe (**G1**) into the product tank.

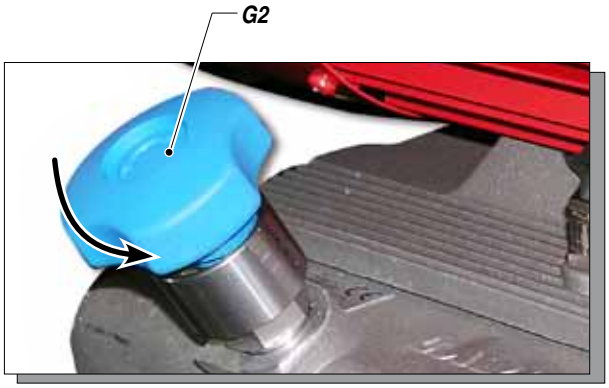
- Open the recirculating-safety valve (**G2**) *(turn clockwise so as the pin slides on the cam track).*



- Press the switch **"ON"** ***(I)*** of the equipment and turn a little the pressure control knob clockwise (**G3**), so as the machine works at the idle speed.

- Make sure the product recycles from the return tube (**G4**).

- Close the recirculating-safety valve (**G2**) *(turn clockwise till the valve has released).*



- Now the machine carries on sucking the product till the flexible hose is full, up to the gun.
  Then it will stop automatically.
- Adjust the work pressure with the knob (**G3**).

SPRAY ADJUSTMENT

- Slowly turn clockwise the pressure control knob to reach the pressure value in order to ensure a good atomization of the product.
- An irregular and marked spray on the sides indicates a low working pressure. On the contrary, a too high pressure causes a high fog *("overspray")* and waste of product.
- In order to avoid overthickness of paint, let the gun advance sideways *(right-left)* when spraying.
- Always paint with regular parallel bands coats.
- Keep a safety and constant distance between the gun and the support to be painted and also keep yourselves perpendicular to it.

NEVER point the spray gun at yourselves or at other people.
The contact with the casting can cause serious injuries.
In case of injuries caused by the gun casting, seek immediate medical advice specifying the type of the product injected.

Recirculating-safety valve: when working at the maximum pressure available, releasing the gun trigger sudden increases of pressure can occur. In this case, the recirculating-safety valve opens automatically eliminating part of the product from the recirculating tube.
Then it closes so as to go back to the first working conditions.

ALARMS

- Flashing lamp (**G4**) for alarms:

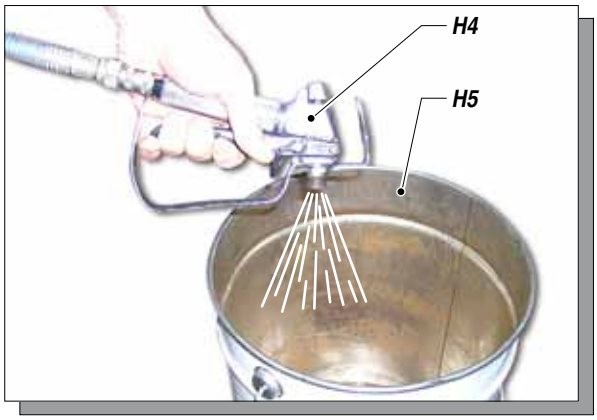
LED	ALARMS
1	Maximum current exceeded
2	Overheating Head Control
3	Overheating motor (not implemented)
4	High voltage feeding current
5	Low voltage feeding current
6	No earthing
7	Faulted pressure sensor
8	Recycling stop (after 15 min.)

H CLEANING AT THE END OF THE WORK

- Reduce pressure to the minimum *(turn counterclockwise the pressure control knob (**H1**)).*
- Press the switch (**H2**) placed on the box of the electric motor, to stop the equipment.

- Release the residual pressure by holding down the trigger of the gun and pointing it into a container.
- Open the recirculating-safety valve (**H3**) to release the pressure in the circuit.

- Lift the suction pipe and replace the product tank with that of the solvent *(ensure it is compatible with the product being used)*.
- Unscrew the gun nozzle *(do not forget to clean it with solvent)*.
- **Press the switch (H2) ON and turn a little the pressure control knob (H1) clockwise so as the machine works till the motor starts.**
- Make sure the solvent recycles the washing fluid from the return tube.
- Close the recirculating-safety valve (**H3**).
- Point the gun (**H4**) into the product tank (**H5**) and, keeping the trigger pressed, release the remaining product till a clean solvent comes out. Now, release the trigger.



- Lift again the suction pipe and remove the solvent tank.
- Now point the gun into the solvent tank and press the trigger so as to recover the residual solvent.
- **As the pump starts idling, press the switch OFF *(0)* to stop the equipment.**
- In case of long storage, we recommend you to suck and to leave light mineral oil inside the pumping group and the flexible hose.

Follow the washing procedure before using again the equipment.

I GENERAL MAINTENANCE

Discharge the pressure in the pump unit *(open the discharge valve)* before carrying out any maintenance.

DAILY

- Clean the filters;
- Clean the nozzles;
- Clean all the varnish circuit with a specific product;
- Check the fuel motor *(see the maintenance table)*.

PERIODICALLY

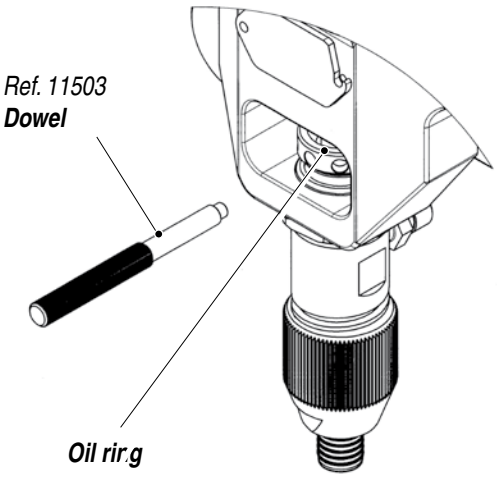
- Check the pumping gaskets draft *(if the product draws, replace gaskets)*;
- Clean the mobile parts from the varnish deposits *(spray guns, etc.)*;
- Check that the tubes and all the fittings are correctly locked.

L ROUTINE MAINTENANCE

CHECK ON THE PACKING NUT

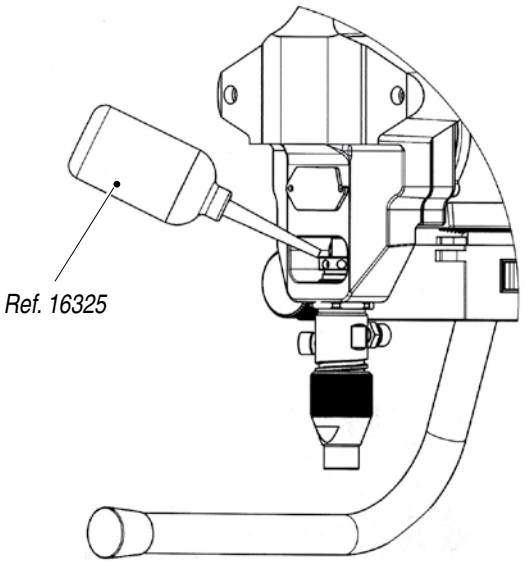
Daily check the packing nut is tight in order to avoid wastes but **not excessively to prevent the piston from seizing and the gaskets from wearing**.

- For tightening, use the wrench supplied *(ref. 11503)*.



ALWAYS DISCONNECT THE POWER SUPPLY AND RELEASE THE PRESSURE IN THE PUMPING GROUP *(open the drain valve)* BEFORE TIGHTENING THE PACKING NUT.

- Use the lubricant supplied *(ref. 16325)* to allow an easy sliding of the piston inside the gasket group.
  Daily top up the packing nut.



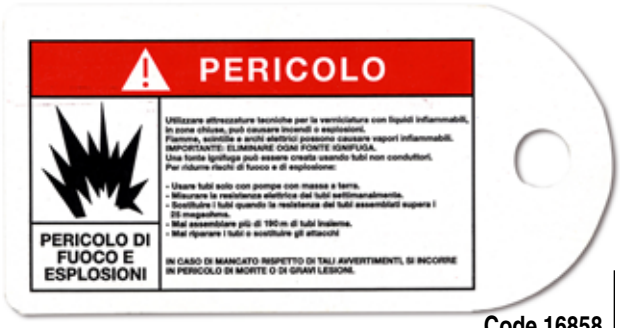
English

M WARNING PLATE

ATTENZIONE
UTILIZZARE GRUPPI ELETTROGENI CON POTENZA:
- modello EXCALIBUR minimo 4,0 KW Monofase
- modello ZEFIRO minimo 5,5 KW Monofase
- modello TAURUS minimo 9,0 KW Monofase
- modello THOR minimo 9,0 KW Monofase

Code 16801

Code 16859



Code 16858

Code 16850

LED
ALLARMI - ALARMS - WARNMELDUNGEN - ALARME
CORRENTE MASSIMA SUPERATA - MAXIMUM CURRENT EXCEEDED
SURRISCALDAMENTO HEAD CONTROL - OVERHEATING HEAD CONTROL
SURRISCALDAMENTO MOTORE - OVERHEATING MOTOR
TENSIONE DI ALIMENTAZIONE ALTA - HIGH VOLTAGE FEEDING CURRENT
TENSIONE DI ALIMENTAZIONE BASSA - LOW VOLTAGE FEEDING CURRENT
MANCANZA CONNESSIONE A TERRA - NO EARTHING
BLOCCO RICIRCOLO (DOPO 15 MIN.) - RECYCLING STOP (AFTER 15 MIN.)

Code 18044

ITALY
ATTENZIONE EFFETTUARE LA MESSA A TERRA DELLA MACCHINA. ACCERTARSI CHE NELL'IMPIANTO DI ALIMENTAZIONE SIA INSERITA LA TERRA.
WARNING EFFECT MACHINE'S EARTHING. MAKE SURE THAT ON ELECTRIC FEEDING PLANT EARTH IS CONNECTED.

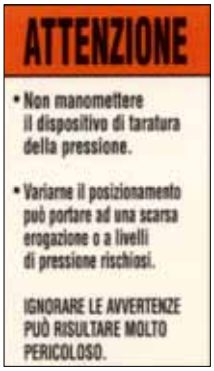
Code 32038

ATTENZIONE / WARNING
MANTENETEVI LONTANI / KEEP CLEAR
PRECAUZIONI / CAUTION
Per evitare danni:
• Non permettere al materiale di gelare nella pistola.
• Non installate valvole di chiusura ad una lunghezza di tubo inferiore a 1,5 mt.
To avoid damage:
• Do not allow material to freeze in sprayer.
• Do not install shutoff devices before the 50 ft. fluid hose.

Code 16856

ATTENZIONE/WARNING
Per ridurre i rischi di scossa elettrica:
• Mettere una massa a terra.
• Tenere la pistola asciutta.
To reduce risk electric shock:
• Connect to grounded outlet.
• Keep sprayer dry.

Code 16852


ATTENZIONE
• Non manomettere il dispositivo di taratura della pressione.
• Variarne il posizionamento può portare ad una scarsa erogazione o a livelli di pressione rischiosi.
IGNORARE LE AVVERTENZE PUÒ RISULTARE MOLTO PERICOLOSO.

Code 16854

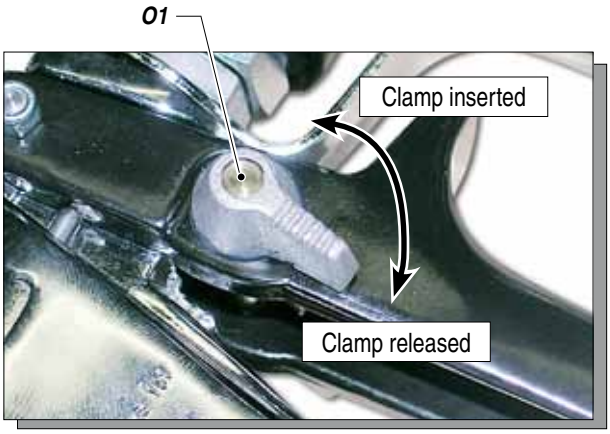
N PROBLEMS AND SOLUTIONS

Problem	Cause	Solution
• **The equipment does not start**	• Lack of voltage; • Considerable drops in mains voltage; • On/Off switch disconnected; • Breakdown of pressure transmitter; • Breakdown of motor electric control box; • The line of material coming out of the pump is already under pressure; • The product is solidified inside the pump;	• Check the correct connection to the power supply; • Check the extension cable; • Ensure the On/Off switch is on the "on" position and turn clockwise the pressure control knob; • Verify and replace it, if necessary; • Verify and replace it, if necessary; • Open the drain valve to release pressure in the circuit; • Open the drain valve to release pressure in the circuit and stop the machine. Disassemble the pumping group and the pressure transmitter and clean;
• **The equipment does not suck the product**	• Suction filter clogged; • Suction ilter too fine; • The equipment sucks air;	• Clean or replace it; • Replace it with a larger-mesh filter (*with very dense products, remove the filter*); • Check the suction pipe;
• **The equipment sucks but does not reach the pressure desired**	• Lack of product; • The equipment sucks air; • The recirculating-safety valve is open; • The gaskets of the pumping group are worn; • Suction or delivery valve dirty;	• Add the product; • Check the suction pipe; • Close the recirculating-safety valve; • Replace the gaskets; • Disassemble the pumping group;
• **When pressing the trigger, the pressure lowers considerably**	• Nozzle too big or worn; • The product is too dense; • The filter of the gun-butt is too fine;	• Replace it with a smaller one; • Dilute the product, if possible; • Replace it with a larger-mesh filter;
• **The pressure is normal but the product is not atomized**	• The nozzle is partially clogged; • The product is too dense; • The filter of the gun-butt is too fine;	• Clean or replace it; • Dilute the product, if possible; • Replace it with a larger-mesh filter;
• **The atomization is imperfect**	• The nozzle is worn;	• Replace it;
• **When releasing the trigger of the gun, the equipment does not stop (*the motor runs slowly and the piston rod keeps on going up and down*)**	• The gaskets of the pumping group are worn; • Suction or delivery valve dirty; • Recirculating-safety valve defective;	• Replace the gaskets; • Disassemble the pumping group and clean; • Verify and replace it, if necessary;

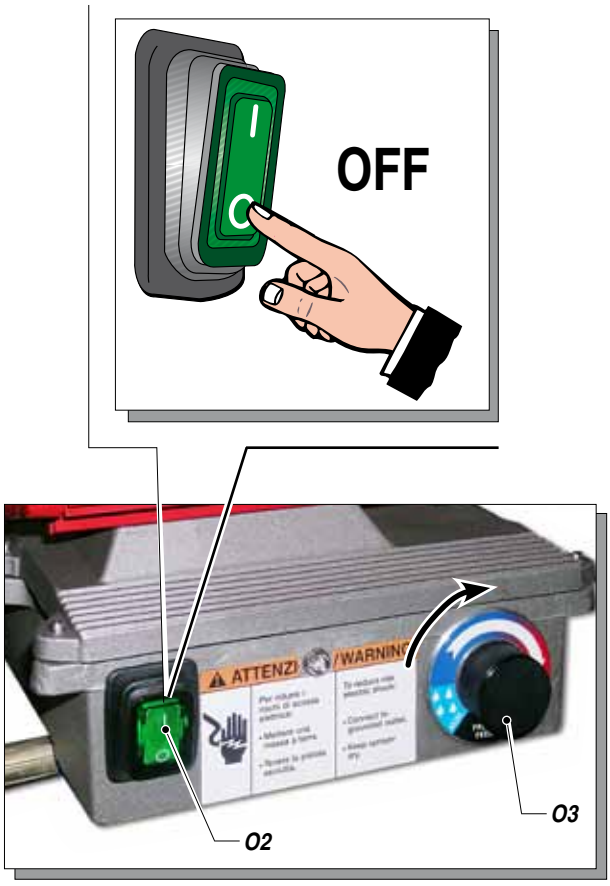
Always close the air compressed supply and unload the plant pressure before performing any check or replacement of pump parts *(see "correct procedure of decompression").*

O CORRECT PROCEDURE OF DECOMPRESSION

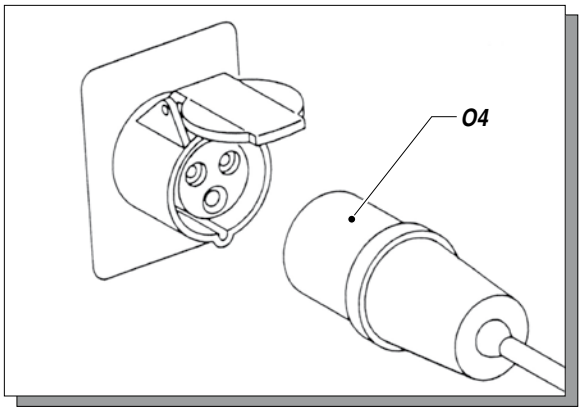
- Insert the gun clamp (**O1**).



- Move the switch (**O2**) to the **OFF** position to stop the equipment.
- Reduce pressure to the minimum *(turn counterclockwise the pressure control knob (**O3**)).*



- Disconnect the power supply cable (**O4**).



- Release the gun clamp (**O1**), point the gun into the tank of the product and press the trigger to release pressure. At the end of the operation, insert the gun clamp.
- Open the recirculating-safety valve (**O5**) to release the residual pressure always clockwise.

WARNING :
If the equipment is still under pressure after performing the operations above described because of the nozzle or the flexible hose clogged, proceed as follows:

- **Loosen very slowly the gun nozzle.**
- **Release the clamp.**
- **Point the gun into the container of the product and press the trigger to release pressure.**
- **Loosen very slowly the fitting of connection from the flexible hose to the gun.**
- **Clean or replace the flexible hose and the nozzle.**

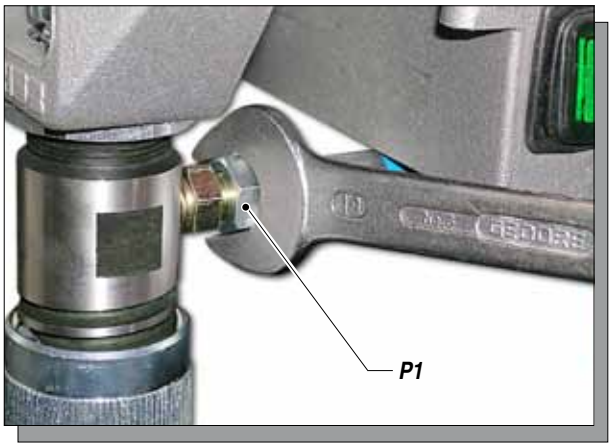
English

P REPLACEMENT OF THE PUMPING GROUP'S GASKETS

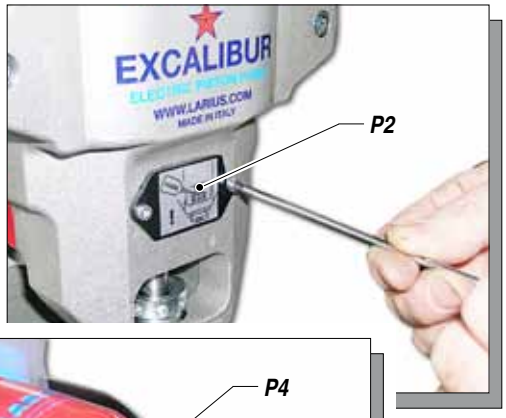
- Carry out this operation after cleaning the tooling.

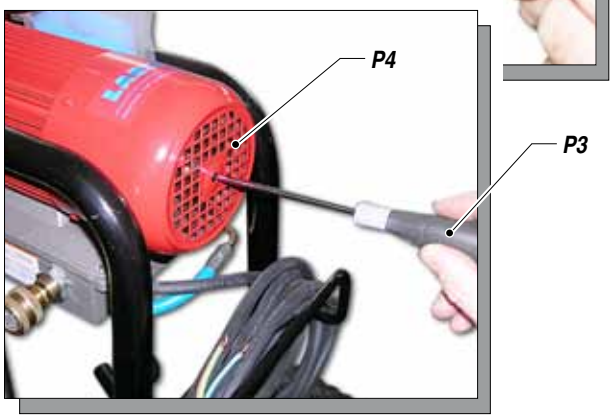
Always disconnect the power supply and release pressure before going on with the operations *(follow the "correct procedure of decompression").*

- Use a 19 mm spanner to unscrew the ring nut (**P1**) on the feed pipe in order to make the operation easier.



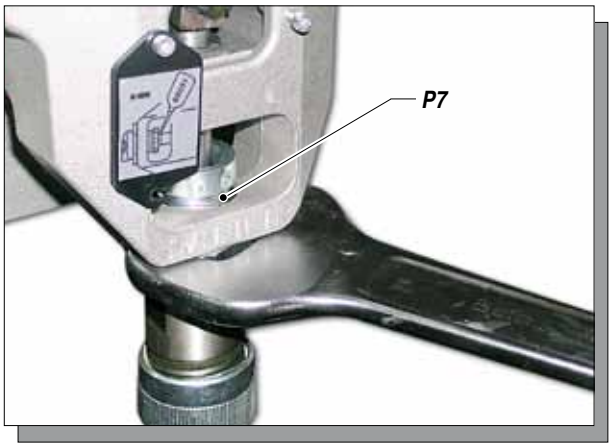
- Release the plastic covering (**P2**).
- Use a screwdriver (**P3**) to turn the motor(**P4**) until the piston stem is at the bottom of its stroke and then move the con-rod to a position in which it can be reached to remove it.



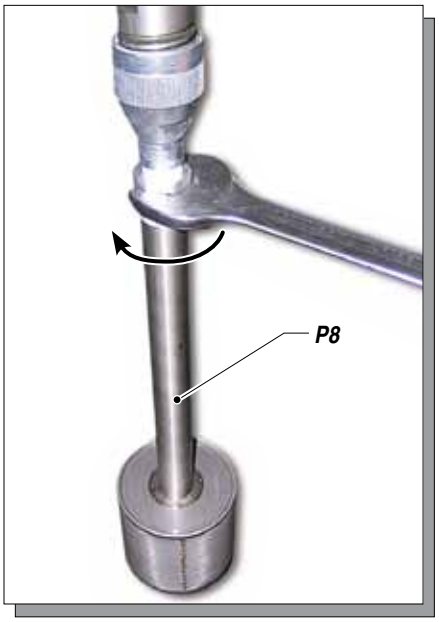


- Remove the locking pin (**P5**) using pliers (**P6**).

- Unscrew the fixing ring nut (**P7**), to the end of the thread using a 45 mm spanner.



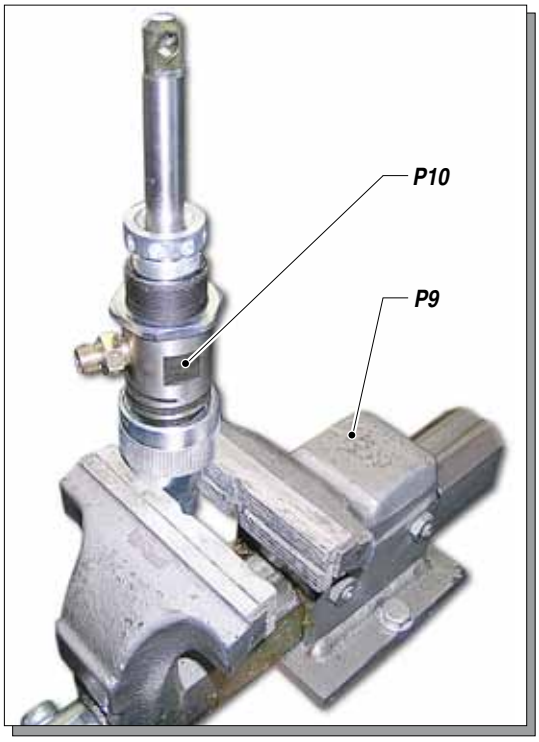
- Unscrew the suction casing using a 32 mm spanner as illustrated. If necessary, remove the suction pipe (**P8**) before continuing with the other operations.



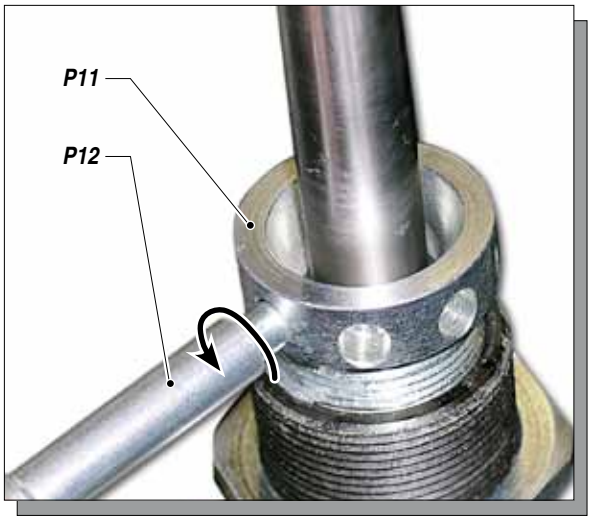
- Disconnect the pumping group by unscrewing the fastening nut *(wrench 45)*.
- Unscrew the pumping group from the housing.

You can now work easily as the pump casing has been freed.

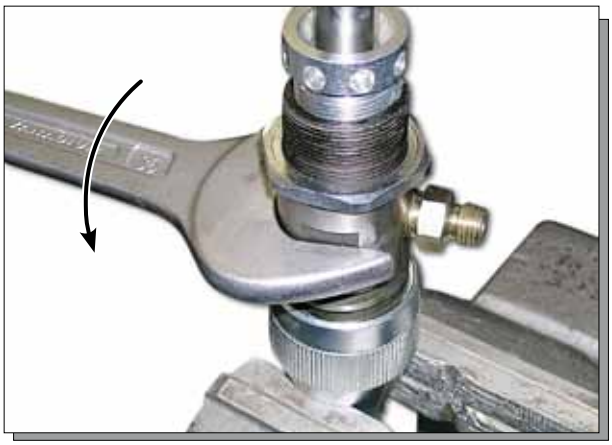
- Grip the complete pump unit (**P9**) in a vice (**P10**) *(as shown)*.



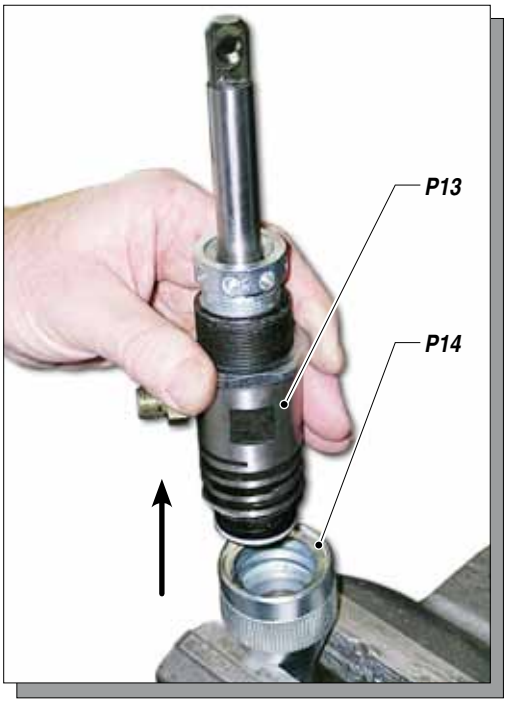
- Slacken the ring nut (**P11**) by two full turns using the special pin (**P12**) supplied.
  Turn anticlockwise as shown.



- Use a 36 mm spanner to unscrew the pump unit as shown.



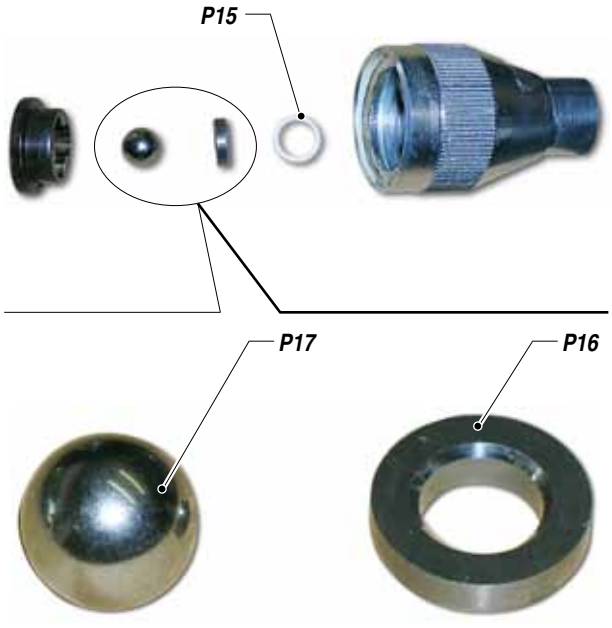
- Remove the pump unit (**P13**) from the foot valve (**P14**) as shown.
  Inspect the two parts separately.



PIT STOP MAINTENANCE
Replacement of upper and lower gaskets 25 minutes.

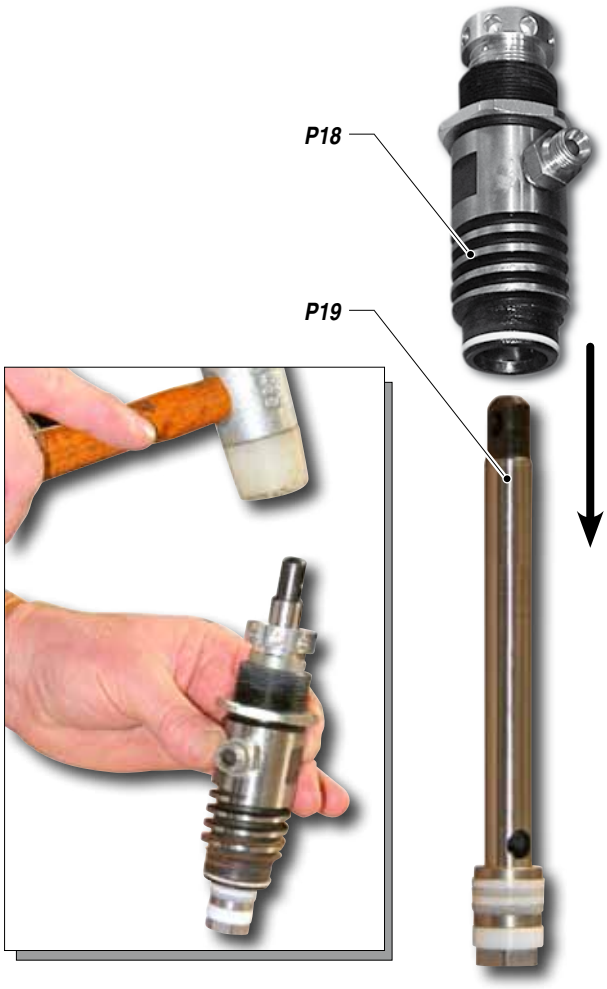
REPLACING THE FOOT VALVE SEALS

- Replace the PTFE gasket (**P15**) located under the ball seating (**P16**).
- Check that the surfaces of the ball seating (**P16**) and the ball (**P17**) are not damaged. If necessary, replace both of them.
- Fit them again using the component sequence shown.

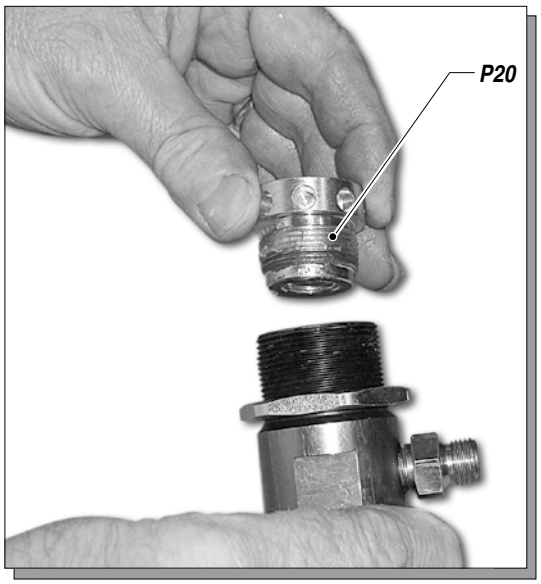


REPLACING THE PUMP UNIT HOUSING UPPER GASKET

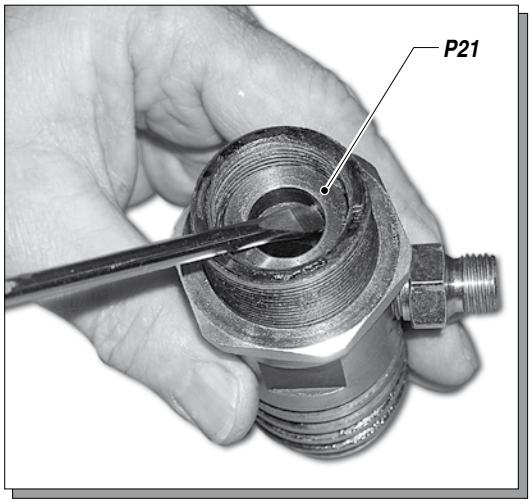
- Remove the piston stem (**P18**) from the pump unit housing (**P19**) as shown.

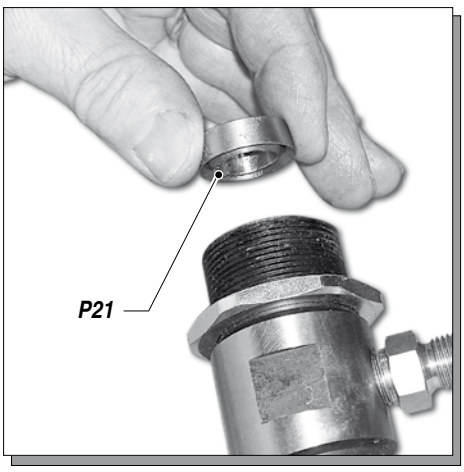


- Unscrew the gasket compression ring nut (**P20**) completely. **All the gaskets in the unit must be replaced at the same time to allow the machine to work properly.**

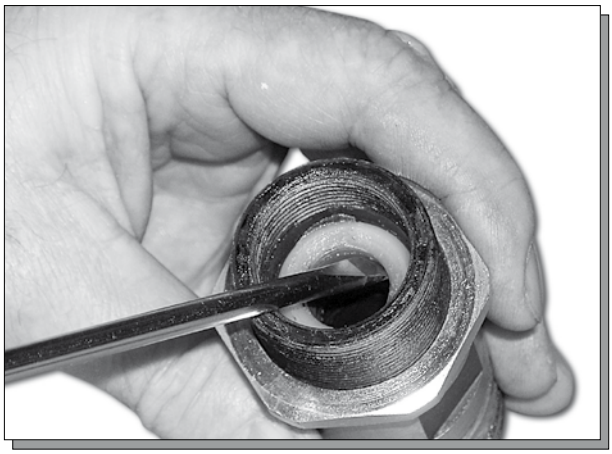


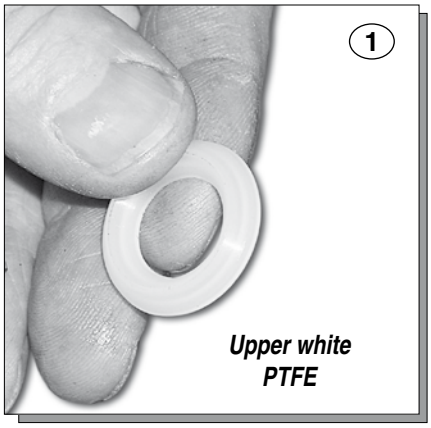
- Remove the upper stainless steel female ring (**P21**) as shown.

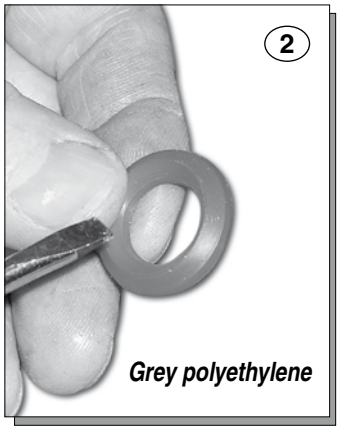


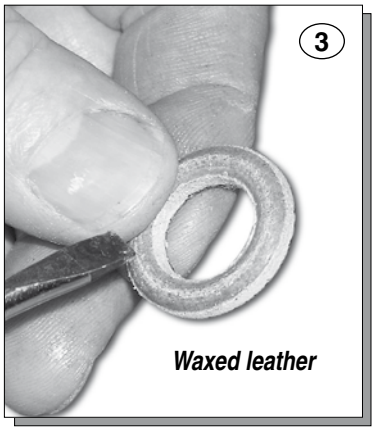


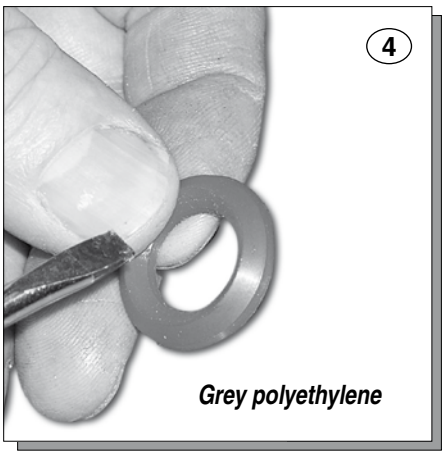
- Remove the series of gaskets contained inside the pump unit housing, as shown.

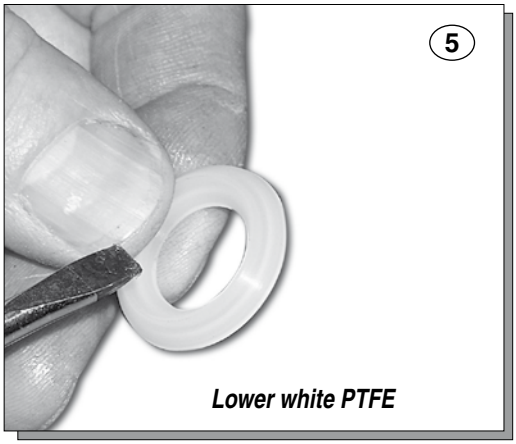




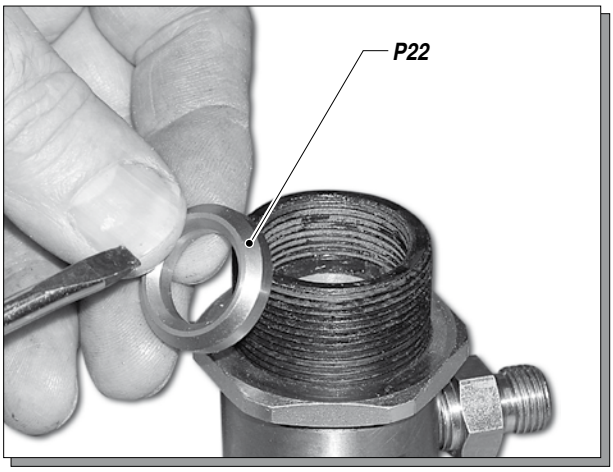








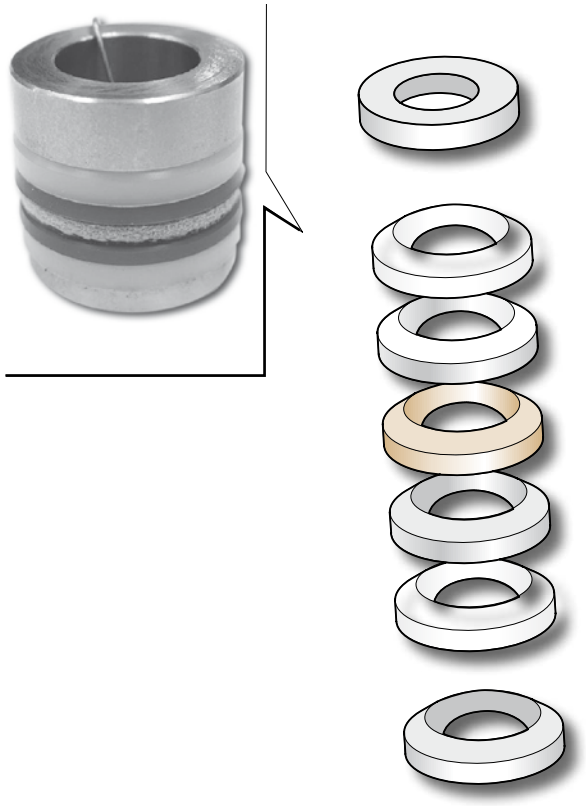
- Remove the lower stainless steel male ring (**P22**) as shown.

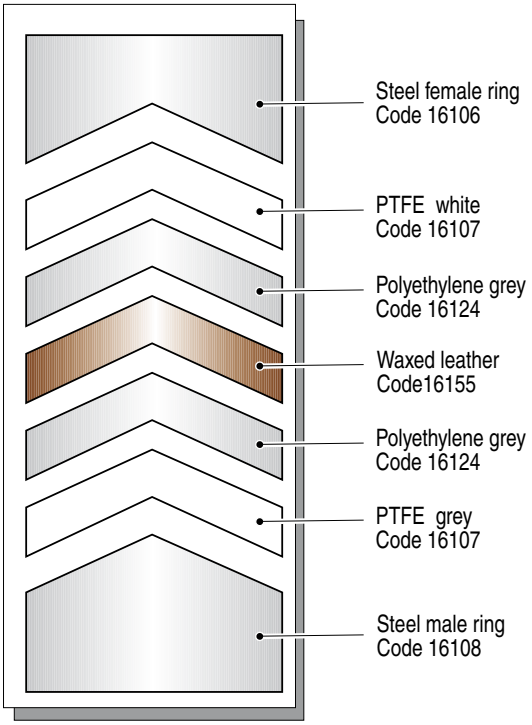


- Fit the new gasket kit according to the component sequence shown in the figure.

English

U P P E R

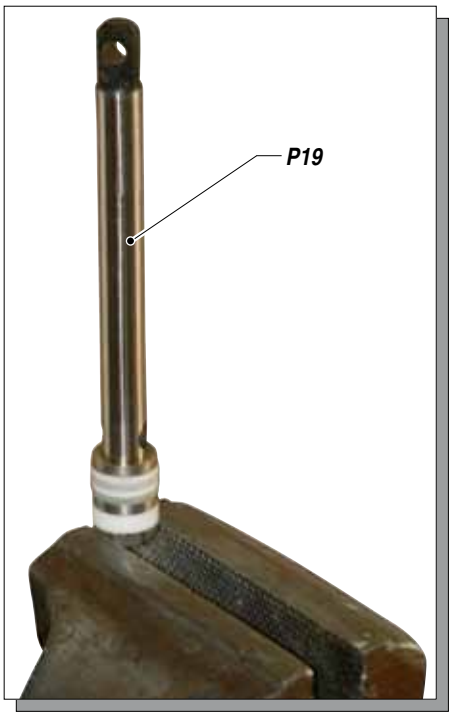




- Remove the PTFE O-ring (**P23**) and replace it with a new one (**P24**).

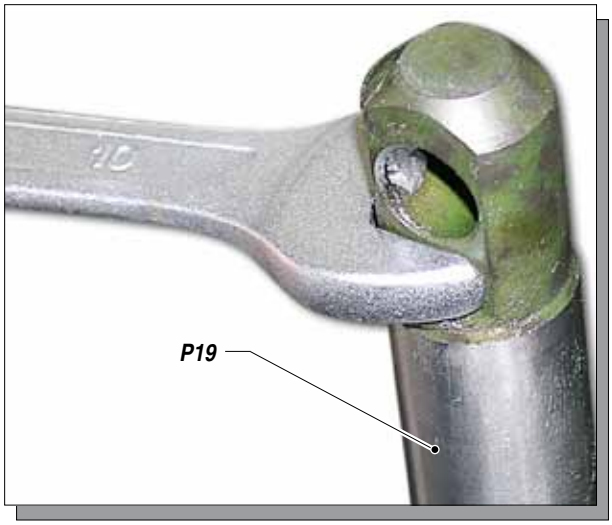
REPLACING THE PUMP UNIT STEM GASKET

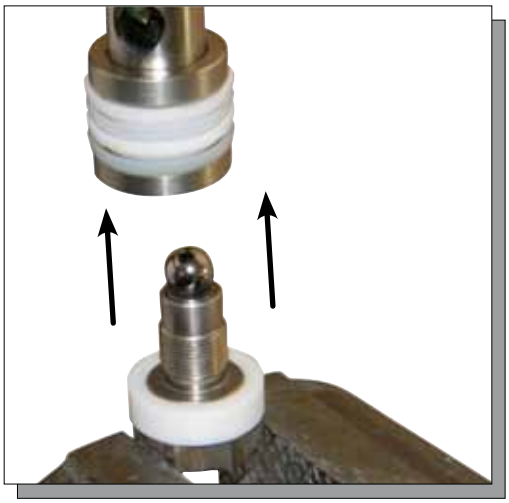
- Secure the stem (**P19**) in a vice as shown.

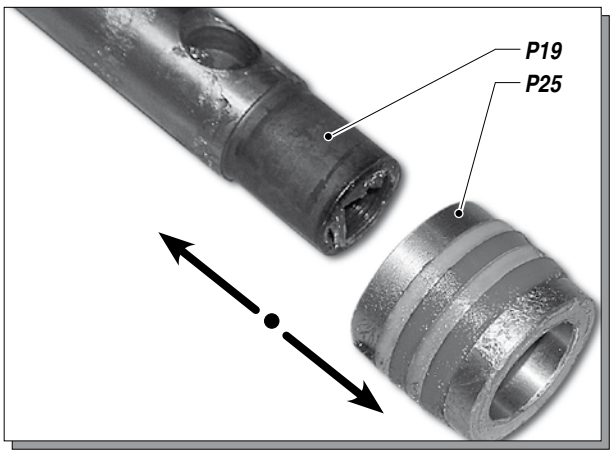


- Use a 10 mm spanner to unscrew and remove the stem (**P19**) as indicated.

- Remove the complete gasket kit (**P25**) from the stem (**P19**), as shown, in order to replace it.

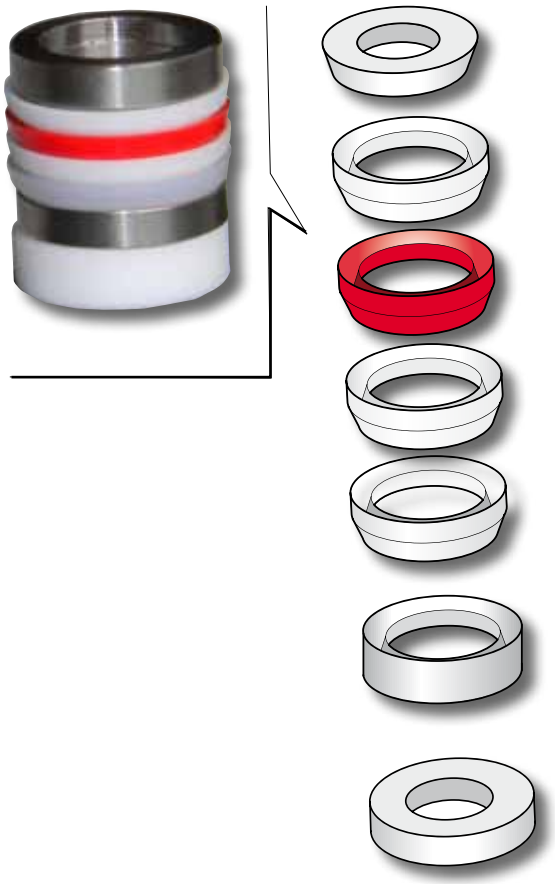


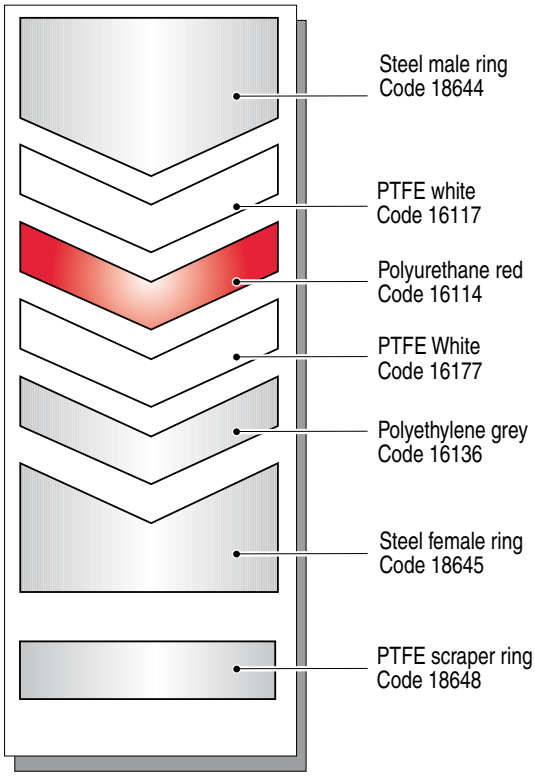




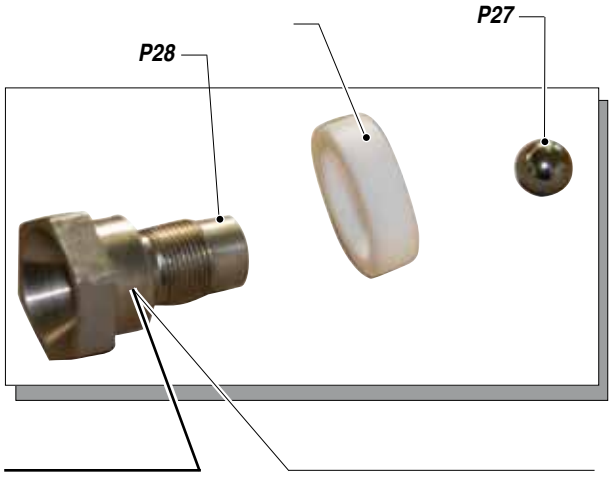
- Fit the new gasket kit according to the component sequence shown in the figure.
  Check the scraper for wear *(Ref. 18648)*.
  Replace if necessary.

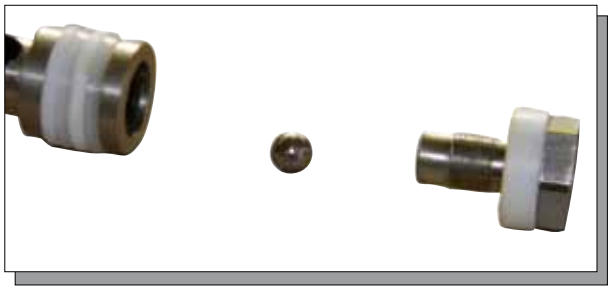
L O W E R





- Replace the grey polyethylene lipped gasket (**P26**) for the valve piston.
- Refit according to the assembly order and the alignment of the lip *(as shown)*.
  Check the surfaces of the ball (P27) and ball seating (P28), and replace both if damaged.

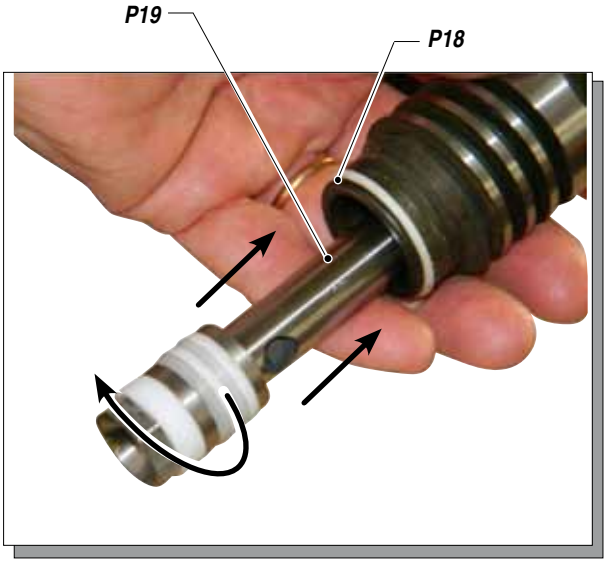




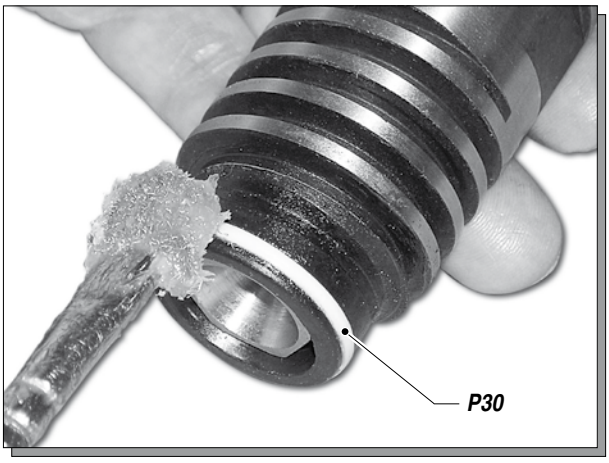
- Assemble the components as shown.

- Lubricate the gaskets (**P29**) and the stem.
  Vaseline is recommended for this task.

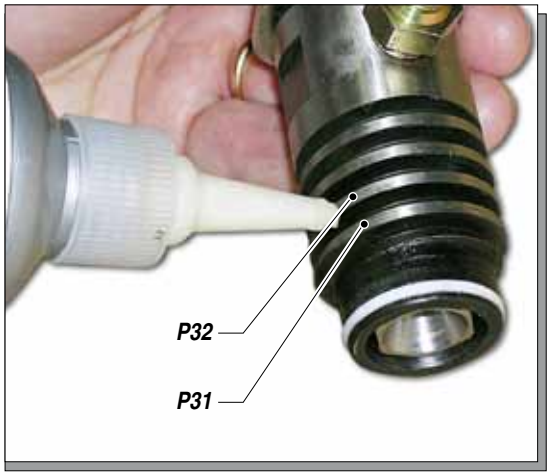
- Insert the stem (**P19**) into the housing (**P18**) rotating it as you do so in order to allow it to slide more easily and to avoid damaging the upper gaskets.



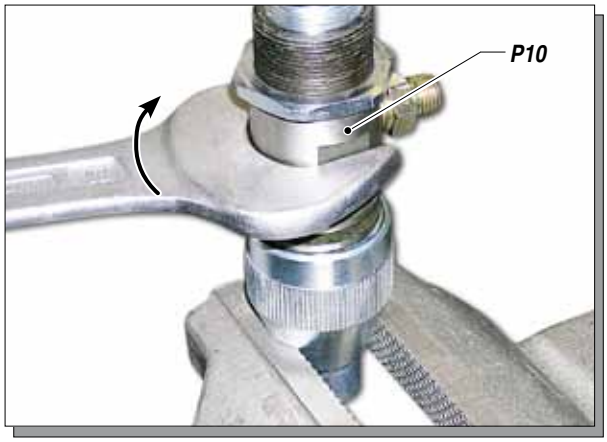
- Lubricate the O-ring (**P30**) *(Ref. 16126)* with grease, as shown.
  Vaseline is recommended for this task.



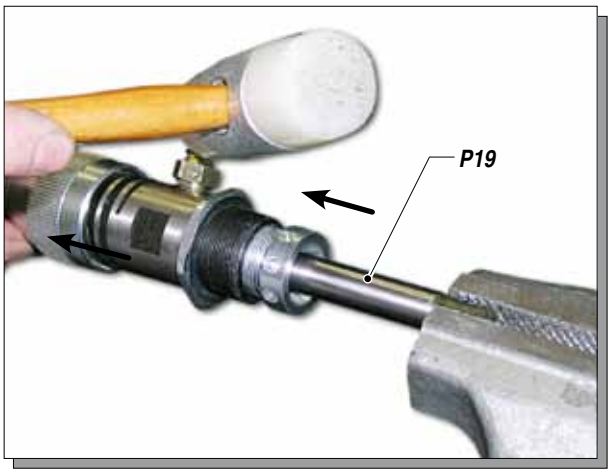
- Put liquid PTFE on the first two turns(**P31**) and (**P32**) to avoid the two components coupled as shown from unscrewing.



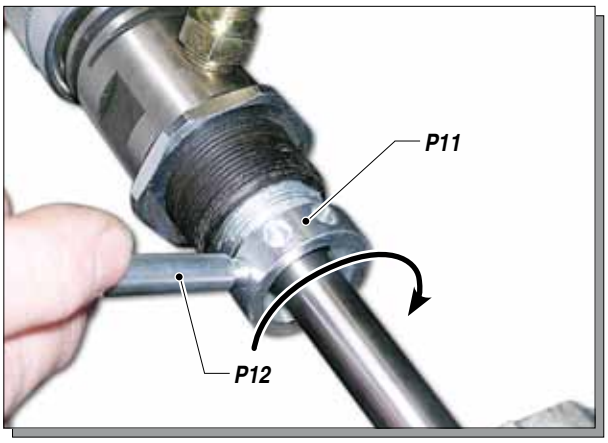
- Use a 36 mm spanner to screw on the pump unit (**P10**).



- Make the piston stem (**P19**) fitted previously complete a full stroke as shown.



- Use the pin (**P12**) supplied to tighten the gasket compression ring nut (**P11**).
  Close this until it is fully touching, without forcing.

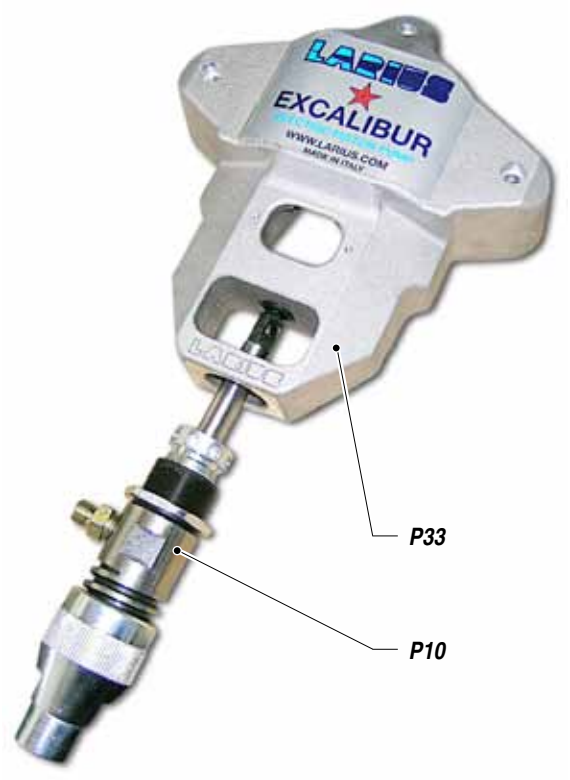


CORRECT POSITIONING OF THE PUMP UNIT

Once the unit has been refitted, proceed as follows:

- Check the position of the con rod, which should be positioned at its lower stopping point.

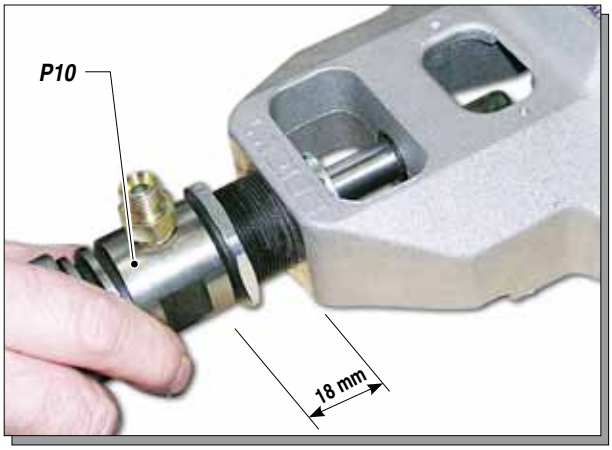
- Put the entire pump unit (**P10**) inside the reduction cover (**P33**) as shown.

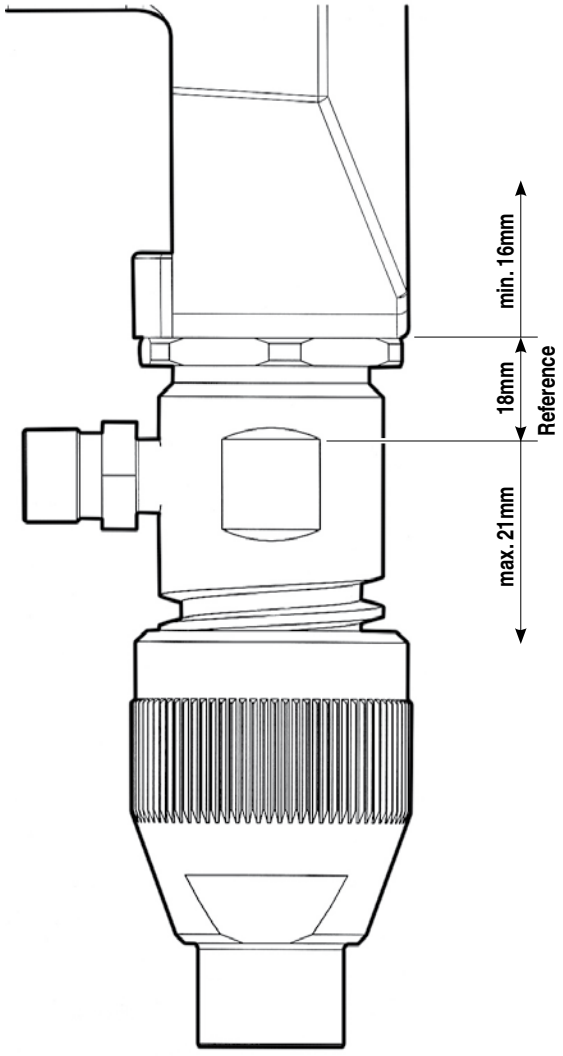


- Screw the entire pump unit onto the front template, making sure that the end of the stem is centred in relation to the groove in the con rod (**P34**).
- Centre the two holes *(con rod + stem)* and insert the stopping pin (**P35**) inside the con rod (**P34**).
- Check that the closing spring (**P36**) in the con rod (**P34**) goes into the pin seating when closed (*as shown*).

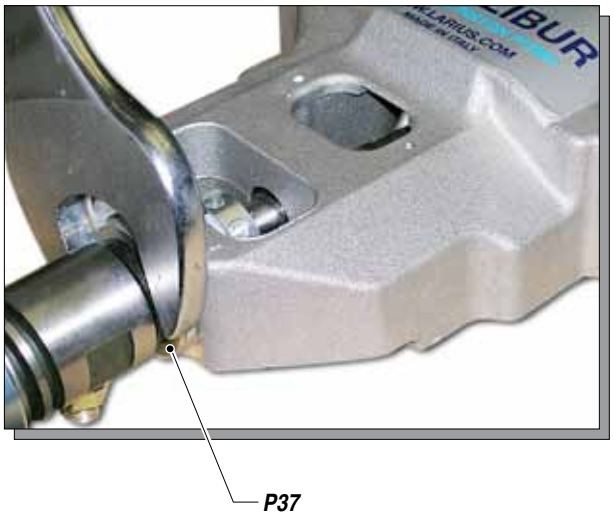
- Screw the entire pump unit (**P10**) inside the reduction cove.
- Use a gauge to measure the gap between the base of the template and the start of the tightening groove.

The reference value *(see drawing)* must be 18 mm. The maximum tolerance accepted for correct operation is 21 mm maximum and 16 mm minimum.



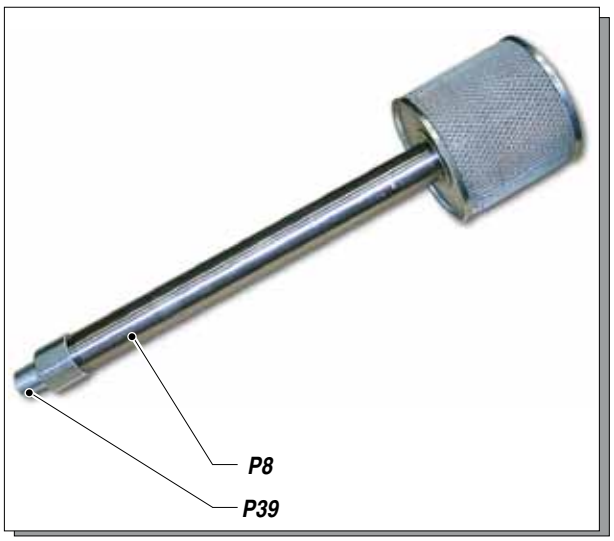


- Once the unit has been positioned correctly, tighten the lock nut (**P37**) hard against the front template.
  To tighten, use a 45 mm spanner.



- Close the inspection cover (**P2**) again.

- Fit the suction pipe (**P8**).
  Put PTFE tape or liquid PTFE over the threaded part (**P39**) before screwing it onto the foot valve..



- For correct reassembly, see the exploded diagram for the pump unit, and invert the order used for disassembly.

SPARE PARTS FRAME MOUNTED

S Frame
pag. 37

U Complete electro-hydraulic control device
Ref. 18770 and 18771
Page 38

R Drive assembly
page 36

AD Accessories
page 49

AC Electric motor
page. 48

V Complete pumping
page 40

Q Recirculating-safety valve group ref. 16400
Page 35

SPARE PARTS TROLLEY MOUNTED

T Trolley
page 37

U Complete electro-hydraulic control device
Ref. 18770 and 18771
Page 38

R Drive assembly
page 36

AD Accessories
page 49

AC Electric motor
page 48

V Complete pumping
page 40

Q Recirculating-safety valve group
ref. 16400 page 35

SPARE PARTS TOP FINISH VERSION

Y PRESSURE
page 44

Z AIR REGULATOR
page 45

U Complete electro-hydraulic control device Ref. 18770 and 18771
Page 38

AC Electric motor
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W Assembly
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AB Trolley
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R Drive assembly
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Q Recirculating-safety valve group ref. 16400
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AD Accessories
page 49

V Complete pumping
page 39

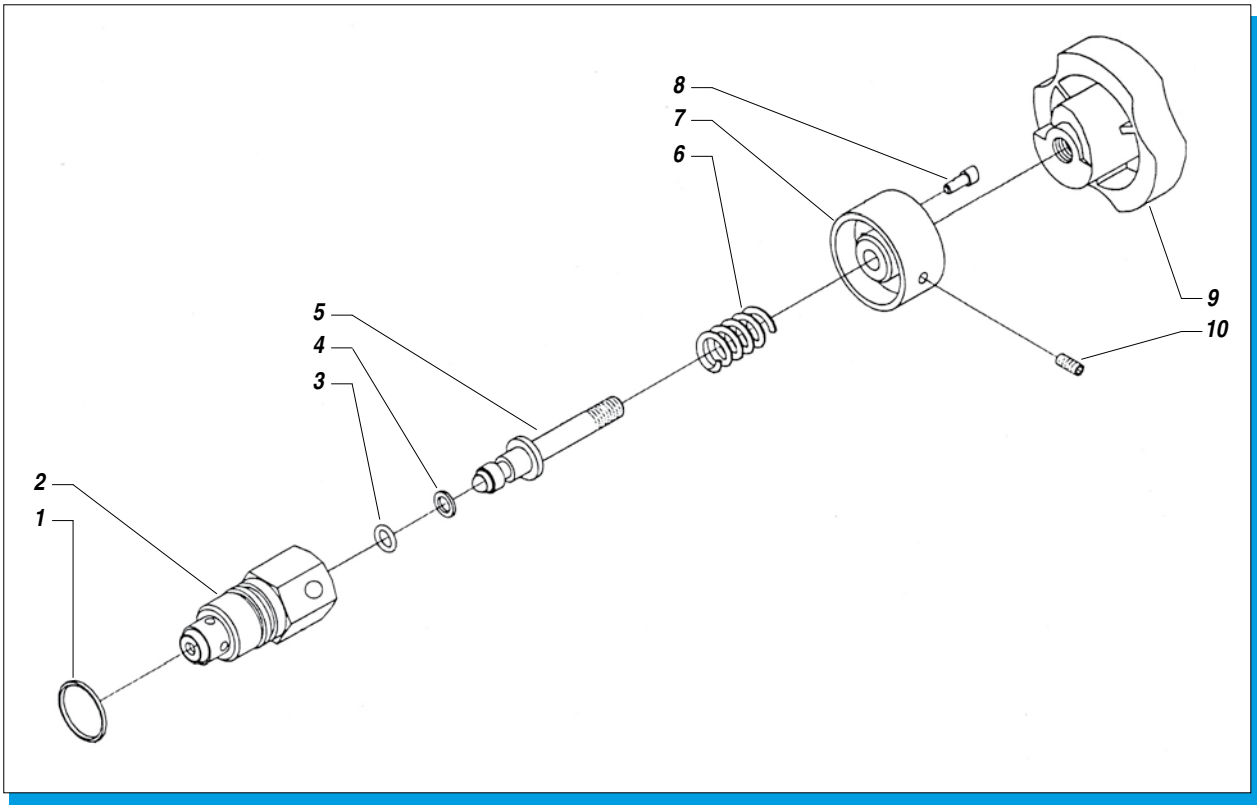
AA AIR TANK
page 46

X Compressor
page 43

Q RECIRCULATING-SAFETY VALVE GROUP REF. 16400

FOR ALL VERSIONS

WARNING: Always indicate code and quantity for each part required.

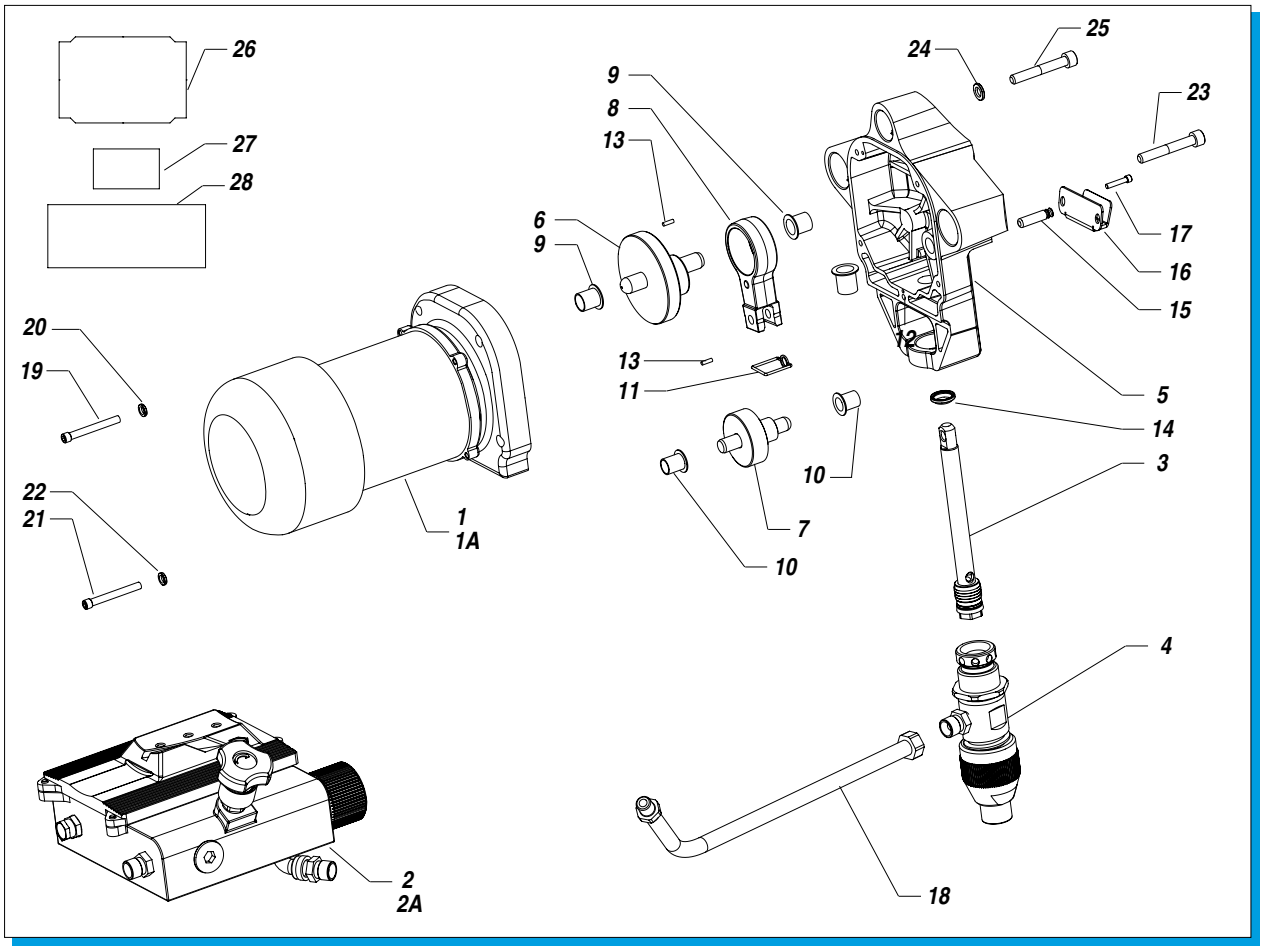


Pos.	Code	Description
-	**16400**	**Recirculating-safety valve group**
1	4033	O-ring
2	16415	Valve housing
3	53007/3	O-ring
4	16419	Antiextrusion ring
5	16420	Material rod
6	16410	Spring
7	46409	Bush
8	16408	Dowel
9	16405	Knob
10	90018	Dowel

English

R DRIVE ASSEMBLY FOR ALL VERSIONS

WARNING: Always indicate code and quantity for each part required.

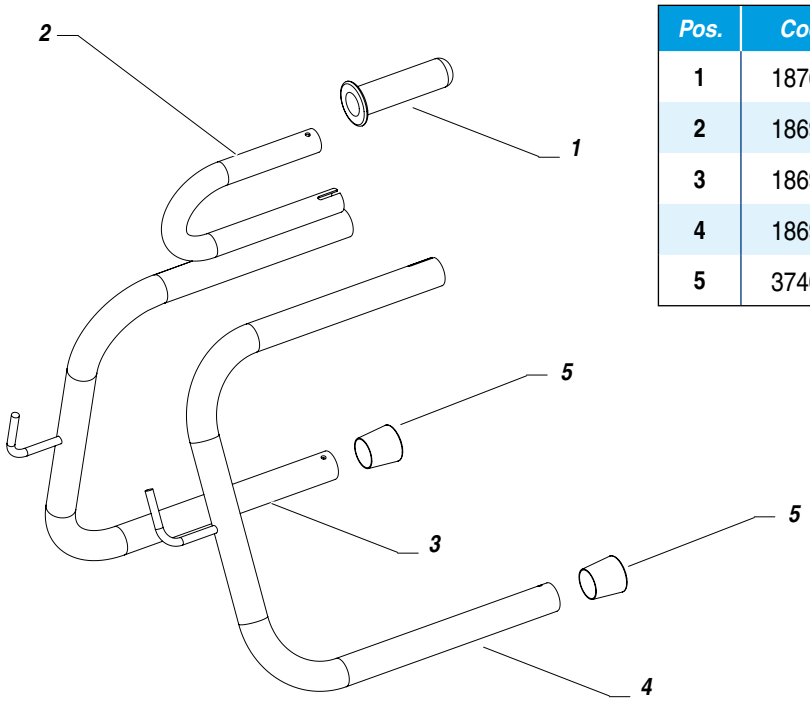


Pos.	Code	Description
1	18660/220	Electric motor 220V 50Hz
1A	18660/110	Electric motor110V 60Hz
2	18770	Compl. electro-hydraulic box 220V
2A	18771	Compl. electro-hydraulic box110V
3	18650	Complete rod
4	18649	Complete sleeve
5	18663	Cover
6	18672	Complete toothed gear
7	18680	Complete toothed driving gear
8	18673	Complete connecting rod
9	18667	Cam bushing
10	18681	Driving cam
11	18665	Spring
12	18664	Bushing
13	4233	Centering pin

Pos.	Code	Description
14	18685	Scraper ring
15	18666	Pin for connecting rod
16	18629	Tin plate door
17	9173	Screw
18	18790	Complete h.p. hose for connection
19	8029	Screw
20	32005	Washer
21	8029	Screw
22	32005	Washer
23	7059	Screw
24	34009	Washer
25	37406	Screw
26	18686	Front label
27	18677	Warning label
28	18044	Flashing label

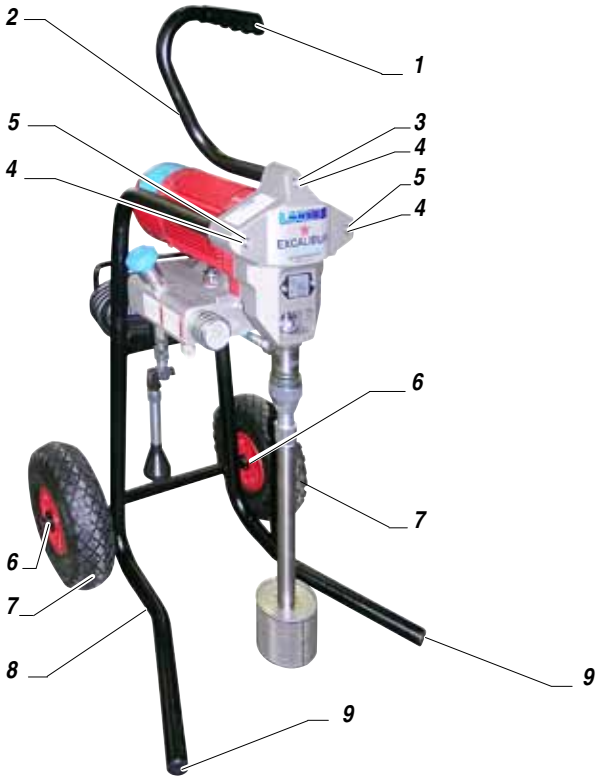
S FRAME

WARNING: Always indicate code and quantity for each part required.



Pos.	Code	Description
1	18765	Handle
2	18699	Handgrip
3	18698	Frame tube - left
4	18698A	Frame tube - right
5	37403	Frame cap

T TROLLEY

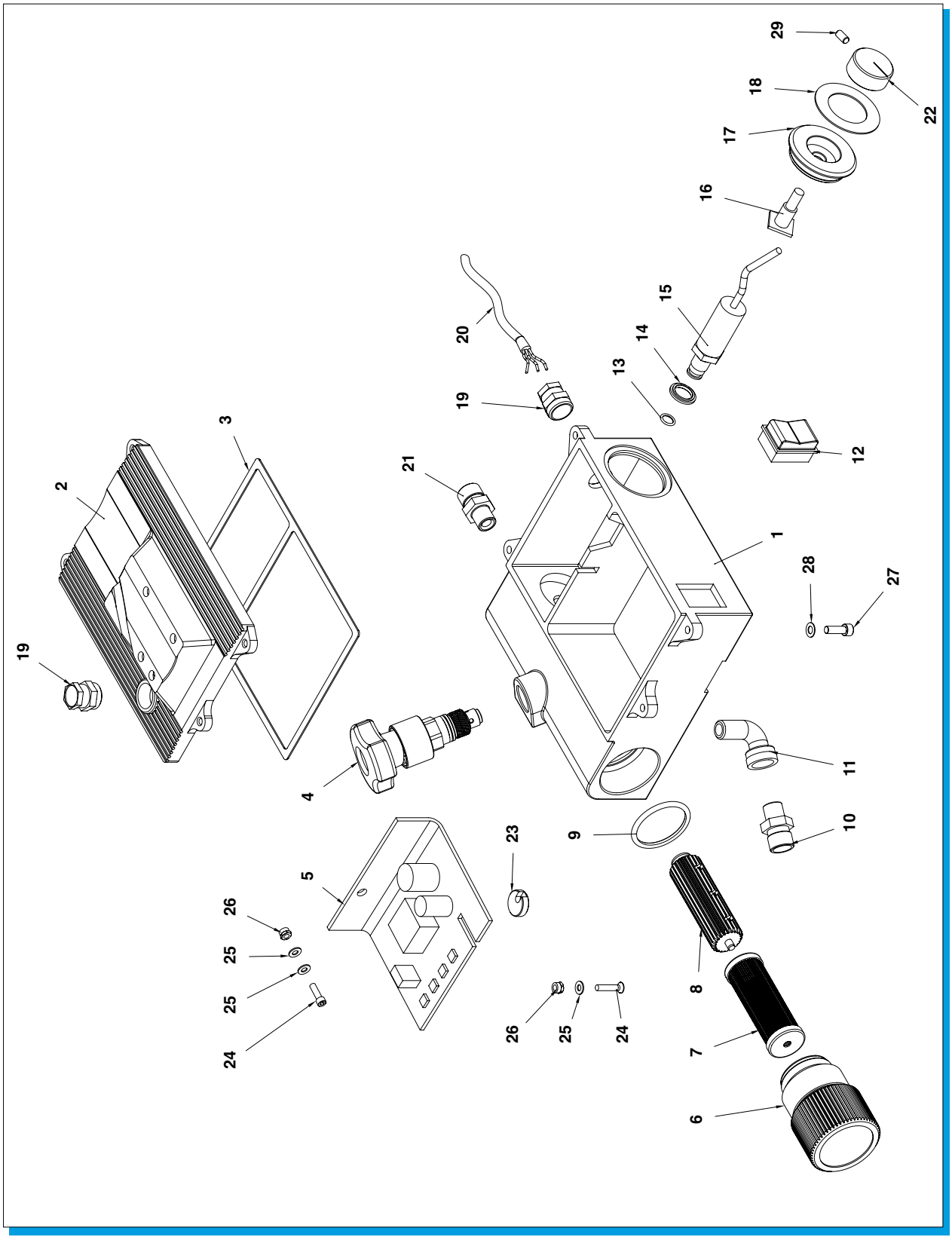


Pos.	Code	Description
1	18765	Handle
2	18631	Handgrip
3	37406	Screw
4	34009	Washer
5	7059	Screw
6	91047	Washer firm wheel
7	37218	Wheel
8	18632	Frame
9	37403	Caps

English

U COMPLETE ELECTRO-HYDRAULIC CONTROL DEVICE REF. 18770 E 18771 FOR ALL VERSIONS

WARNING: Always indicate code and quantity for each part required.



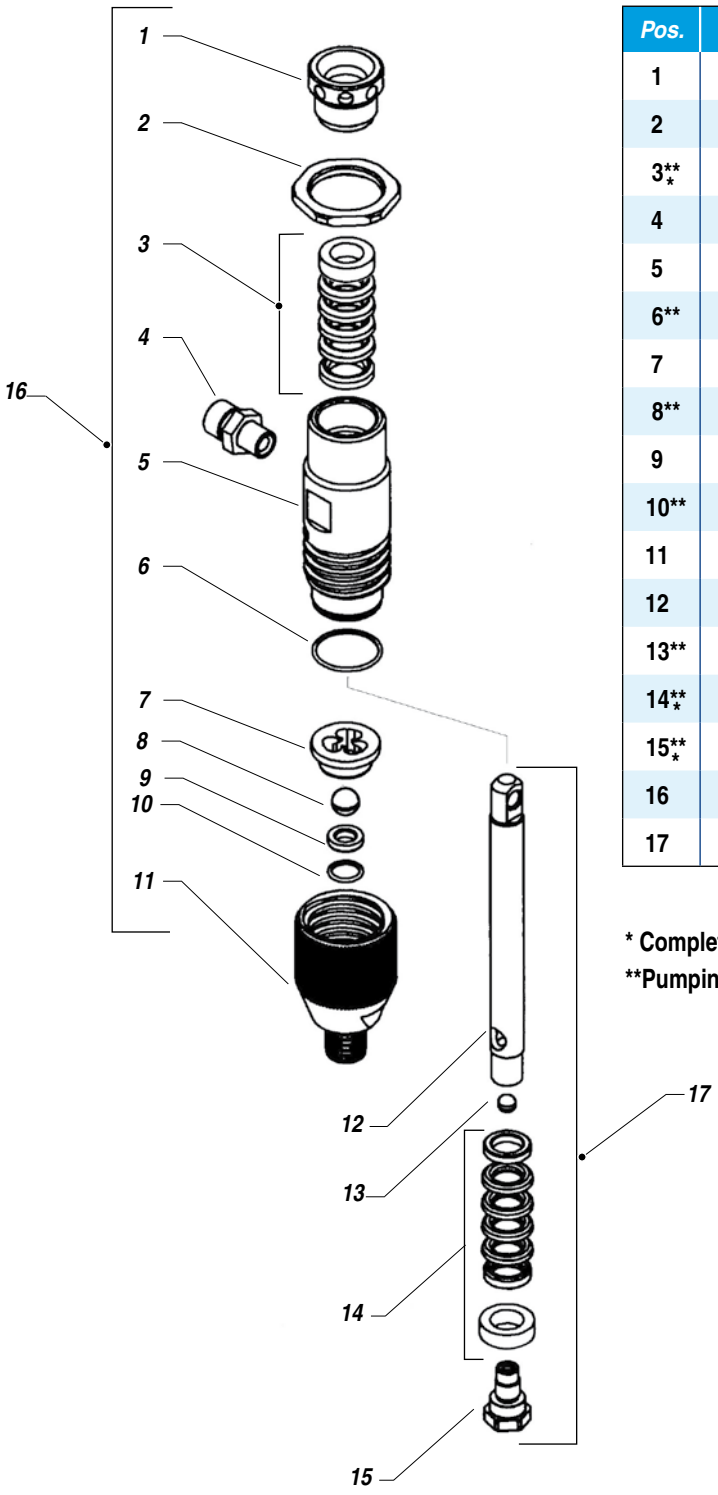
Pos.	Code	Description	Q.ty
	18770	**Complete electro-hydraulic control 220V/50Hz**	1
	18771	**Complete electro-hydraulic control 110V/60Hz**	1
1	18688	Electro ID box	1
2	18654	Cover box	1
3	18625	Gasket	1
4	16400	Recirculating-safety valve	1
5	18654/220	Electronic card 220V	1
5	18654/110	Electronic card 110V	1
6	18580	Complete filter cap	1
7	16205	Filter sieve	1
8	18627	Filter sieve support	1
9	18622	Or	1
10	96206	Union	1
11	18614	Union	1
12	5933	Switch	1

Pos.	Code	Description	Q.ty
13	18689	Orm	1
14	18684	Gasket	1
15	18692	Pressure sensor	1
16	18693	Potentiometer	1
17	18682	Plug	1
18	18687	Pressure label	1
19	18871	Cable fastener	2
20	18870	Power cable	1
21	96208	Union	2
22	18694	Control knob	1
23	18872	Spacer card	1
24	5379	Screw	2
25	5339	Washer	3
26	5114	Nut	2
27	4019	Screw	4
28	5737	Washer	4
29	95210	Dowel	1

V COMPLETE PUMPING GROUP REF. 18885

FOR ALL VERSIONS

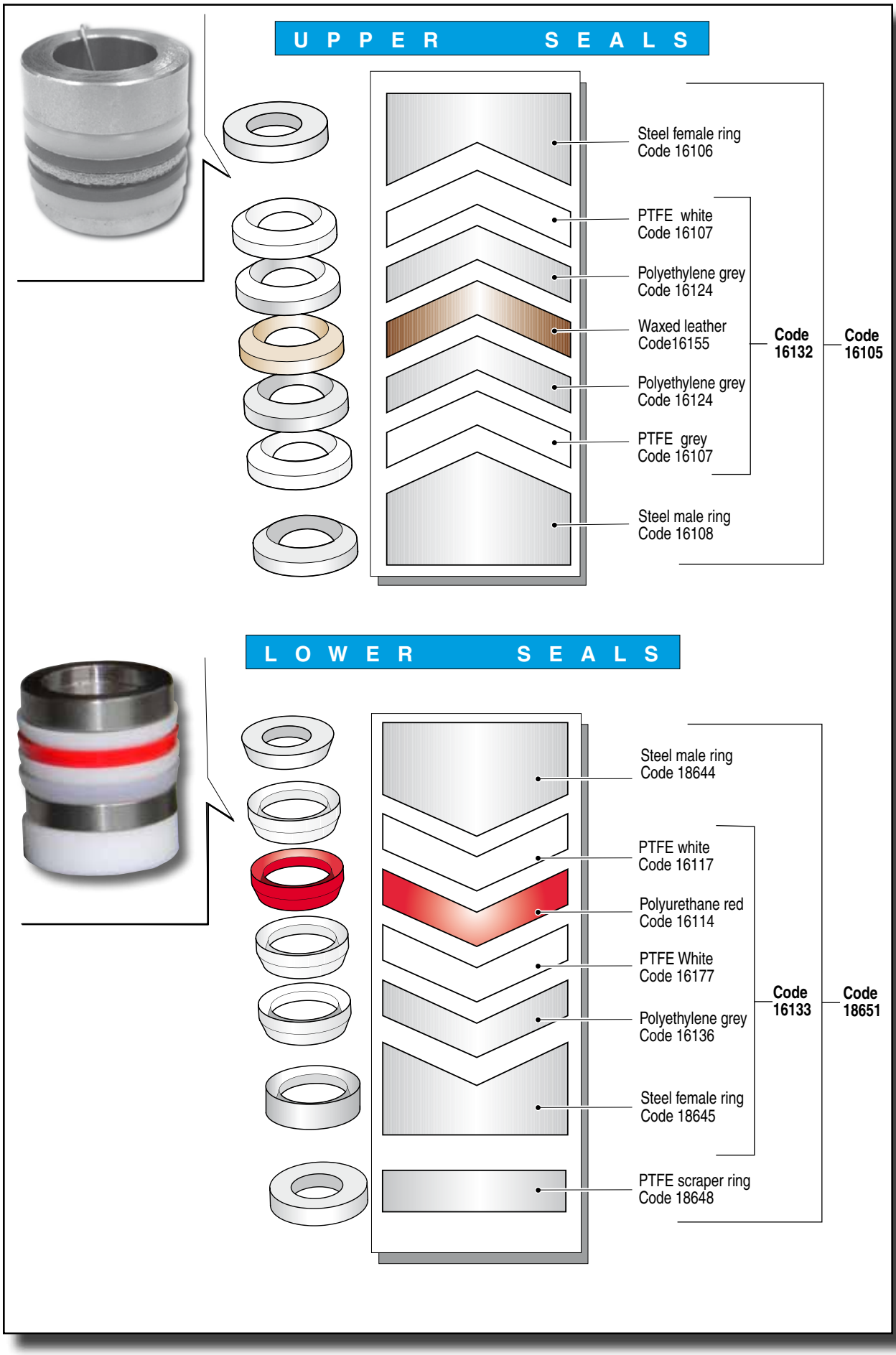
WARNING: Always indicate code and quantity for each part required.



Pos.	Code	Description
1	16109	Packing nut
2	16127	Lock nut
3** *	16105	Complete upper seals
4	96208/1	Union
5	18640	Sleeve
6**	16126	O-ring
7	18642	Ball guide
8**	33028	Ball
9	91018	Ball housing
10**	18675	O-ring
11	18641	Foot valve
12	18652	Piston rod
13**	16130	Ball
14** *	18651	Complete lower seals
15** *	18655	Complete foot valve
16	18649	Complete sleeve assembly
17	18650	Complete piston

*** Complete gasket kit (upper and lower) cod. 18855**
****Pumping maintenance kit cod. 40106**

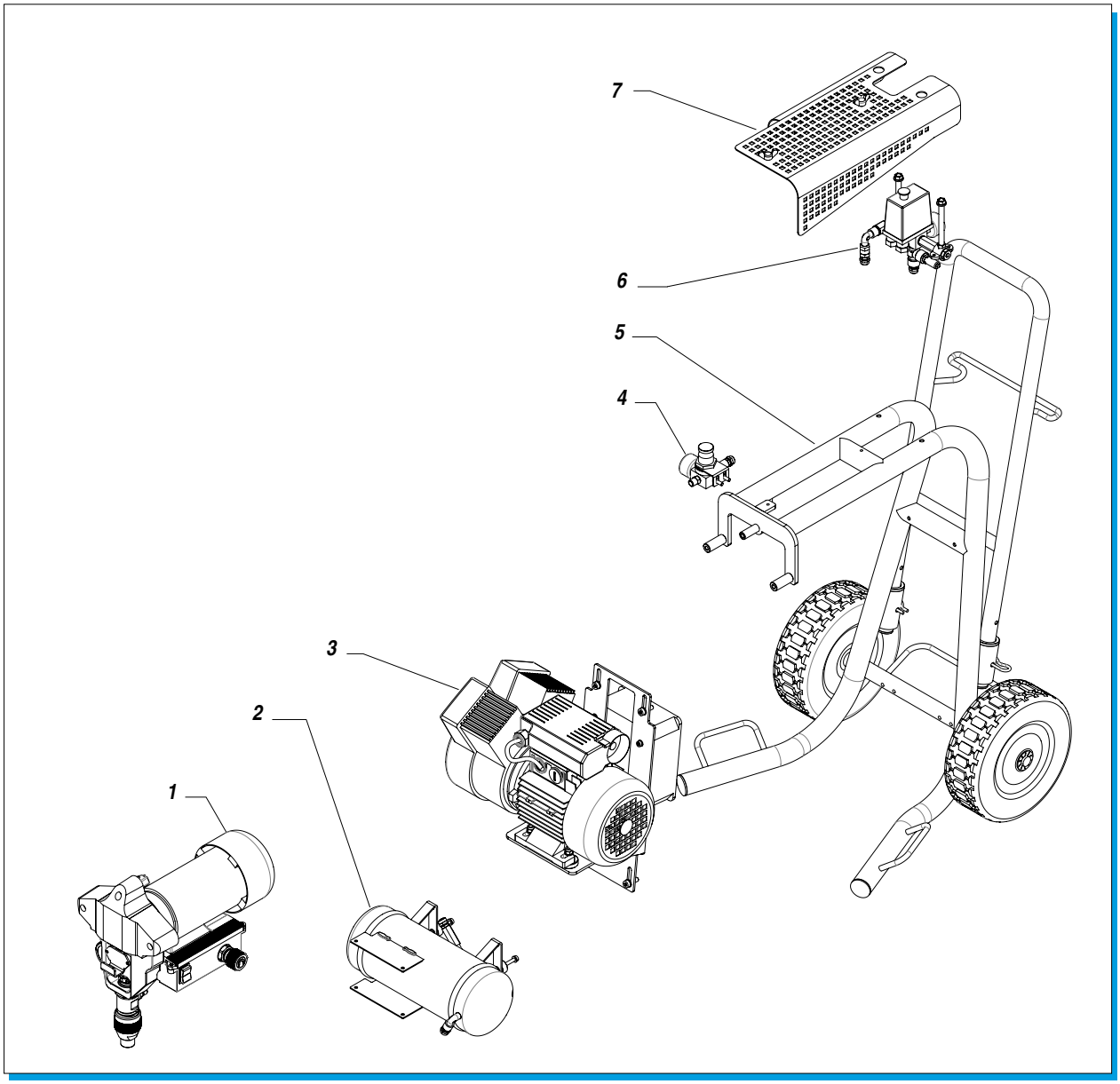
GASKETS ASSEMBLY



English

W MACHINE ASSEMBLY FULL TOP FINISH

WARNING: Always indicate code and quantity for each part required.



Pos.	Code	Description	Q.ty
1	18774	Excalibur 230V	1
2	18796	Air tank	1
3	18793	Compressor air	1
4	18795	Air regulator	1
5	18792	Trolley	1
6	18794	Pressure	1

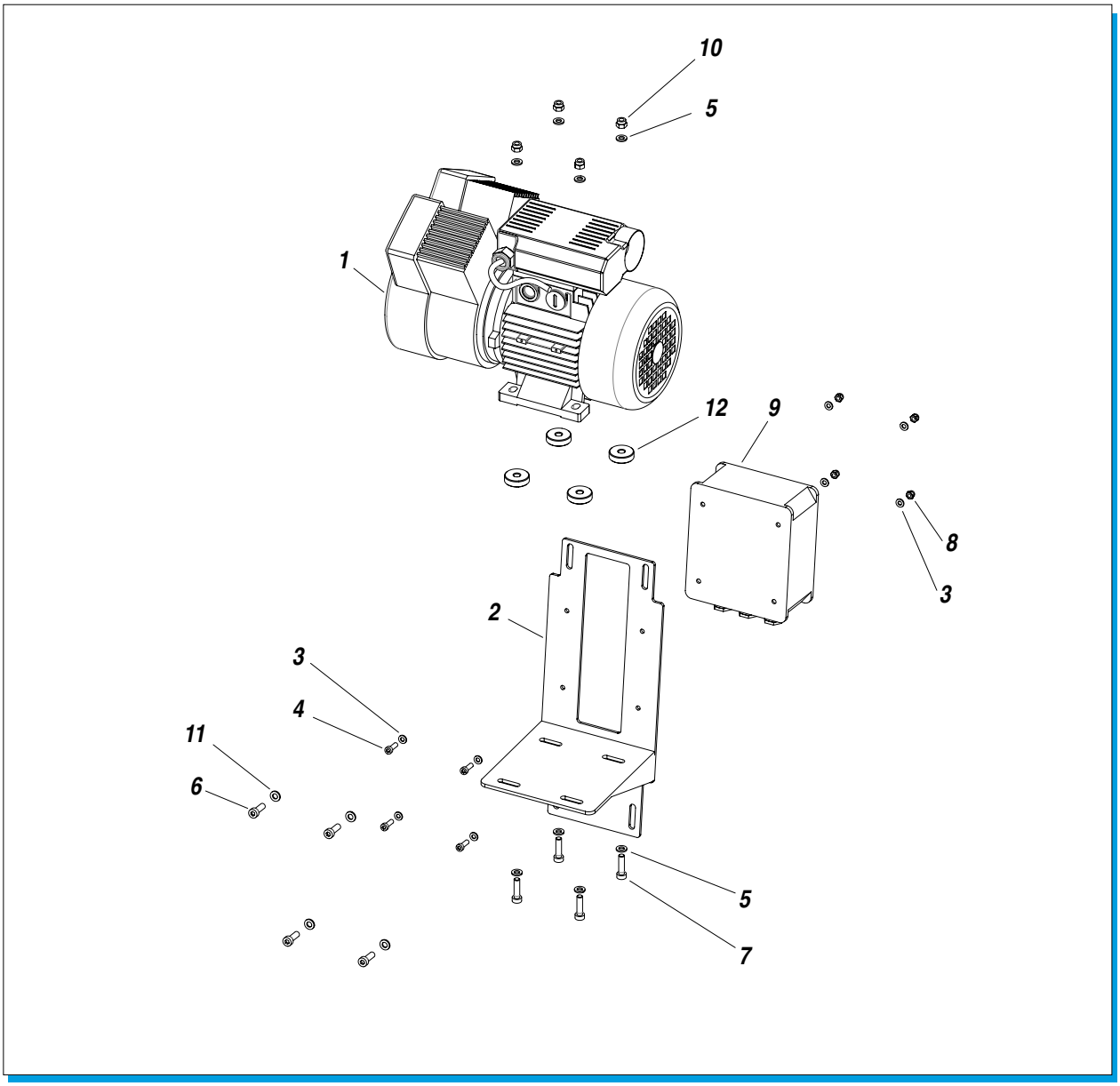
Pos.	Code	Description	Q.ty
7	18797	Upper carter	1
-	16602	Junction connection	1
-	18182	Dip hose	1
-	37216	Stainless steel filter	1
-	18654/220	Electronic card	1

English

X AIR COMPRESSOR ASSEMBLY GROUP REF. 18793

VERSION ONLY TOP FINISH

WARNING: Always indicate code and quantity for each part required.



Pos.	Code	Description	Q.ty
1	30542/1	Air compressor	1
2	18798	Compressor bracket	1
3	5263	Washer UNI 6592 Ø 6	9
4	91062	Screw TCE UNI 5931 M6x20	4
5	510026	Washer UNI 6592 Ø 8	8
6	96031	Screw TCE UNI 5931 M8x25	4

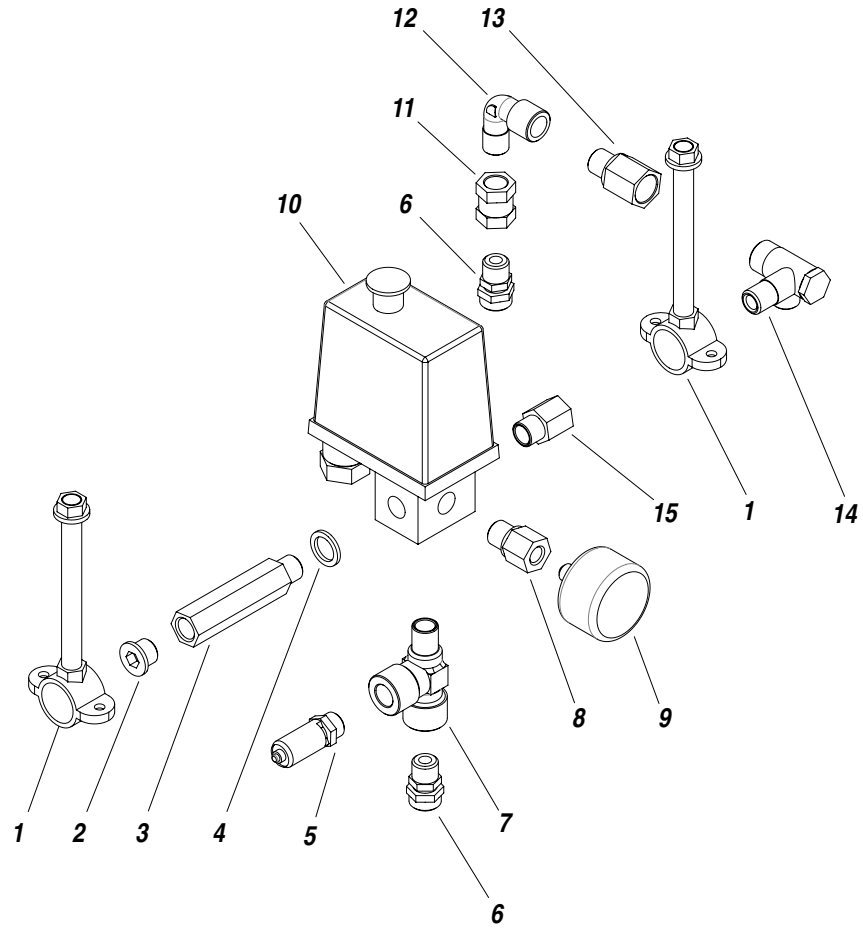
Pos.	Code	Description	Q.ty
7	6151	Screw TCE UNI 5931 M8x50	4
8	8042	Nut locking UNI 7473 M6	4
9	18784	Electrical box	1
10	3637	Nut locking UNI 7473 M8	4
11	32024/1	Washer Ø 8x24	4
12	18463	Spacer	4

English

Y ASSEMBLY PRESSURE COMPRESSOR REF. 18794

VERSION ONLY TOP FINISH

WARNING: Always indicate code and quantity for each part required.



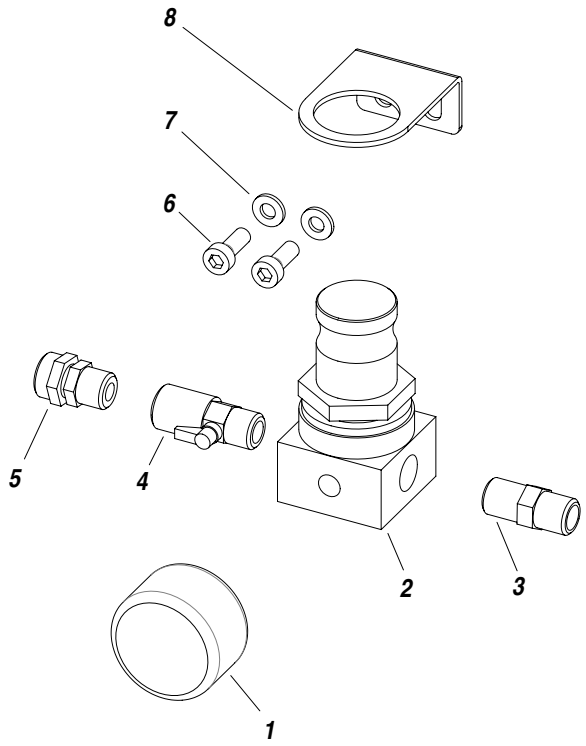
Pos.	Code	Description	Q.ty
1	4515	Collar 1/2”	2
2	8083	Cap 1/4”	1
3	22047	M-F Extension 1/4	1
4	33012	Copper Gasket 1/4”	1
5	30559	Exhaust valve	1
6	16053	Air connection 1/4 pipe Ø10	2
7	22753	Connection T 1/4” MFF	1
8	22027	Reduction M-F 1/4 - 1/8	1

Pos.	Code	Description	Q.ty
9	8167	BP Manometer 0-10 bar	1
10	30536	Pressure switch	1
11	18772	Extension 1/4” FF	1
12	5255	MF Elbow 1/4”	1
13	4801	Reduction 3/8 - 1/4 FM	1
14	30559/1	One-way valve 3 way	1
15	22027	Extension MF	1

Z AIR REGULATOR ASSEMBLY REF. 18795

VERSION ONLY TOP FINISH

WARNING: Always indicate code and quantity for each part required.



Pos.	Code	Description	Q.ty
1	8167	BP Manometer 0-10 bar	1
2	3344	Regulator 1/4" 0-8 bar	1
3	96028	Adapter 1/4 - 194 CON-CIL	1
4	4004	Ball valve	1

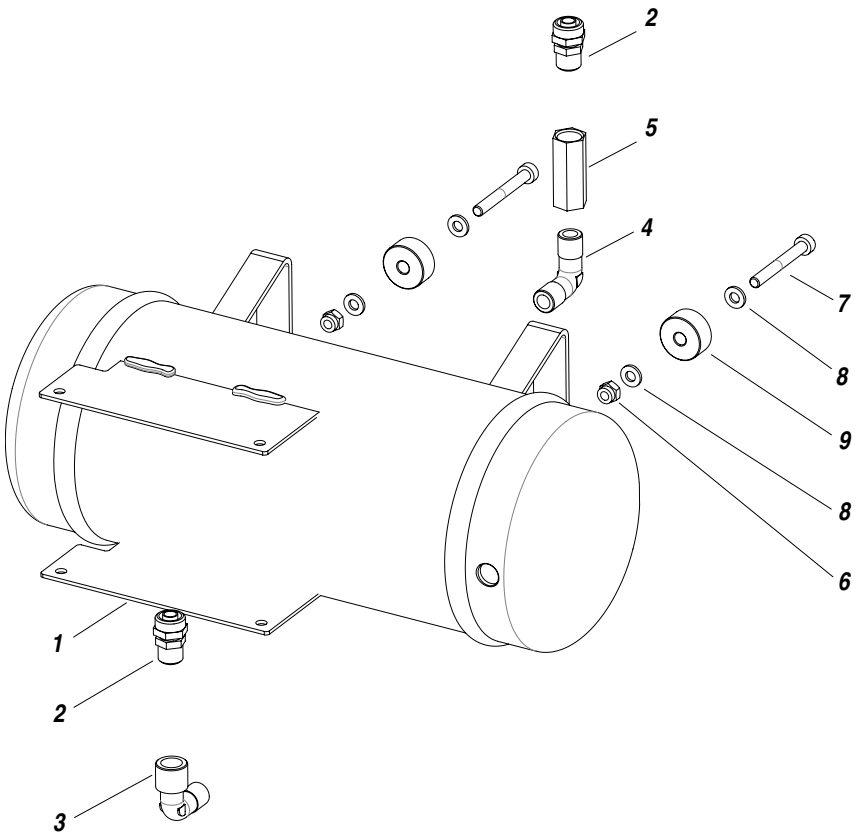
Pos.	Code	Description	Q.ty
5	16053	Air connection 1/4 pipe Ø10	1
6	54004	TCE Screw UNI 5931 M6x16	2
7	950633	Washer Ø6 UNI 6592	2
8	510510	Bracket for regulator	1

English

AA ASSEMBLY AIR TANK REF. 18796

VERSION ONLY TOP FINISH

WARNING: Always indicate code and quantity for each part required.



Pos.	Code	Description	Q.ty
1	30540	Air tank	1
2	16053	Air connection 1/4 pipe Ø10	2
3	5255	Elbow 1/4" MF	1
4	3365	Elbow 1/4" MM	1
5	9902	Check valve	1

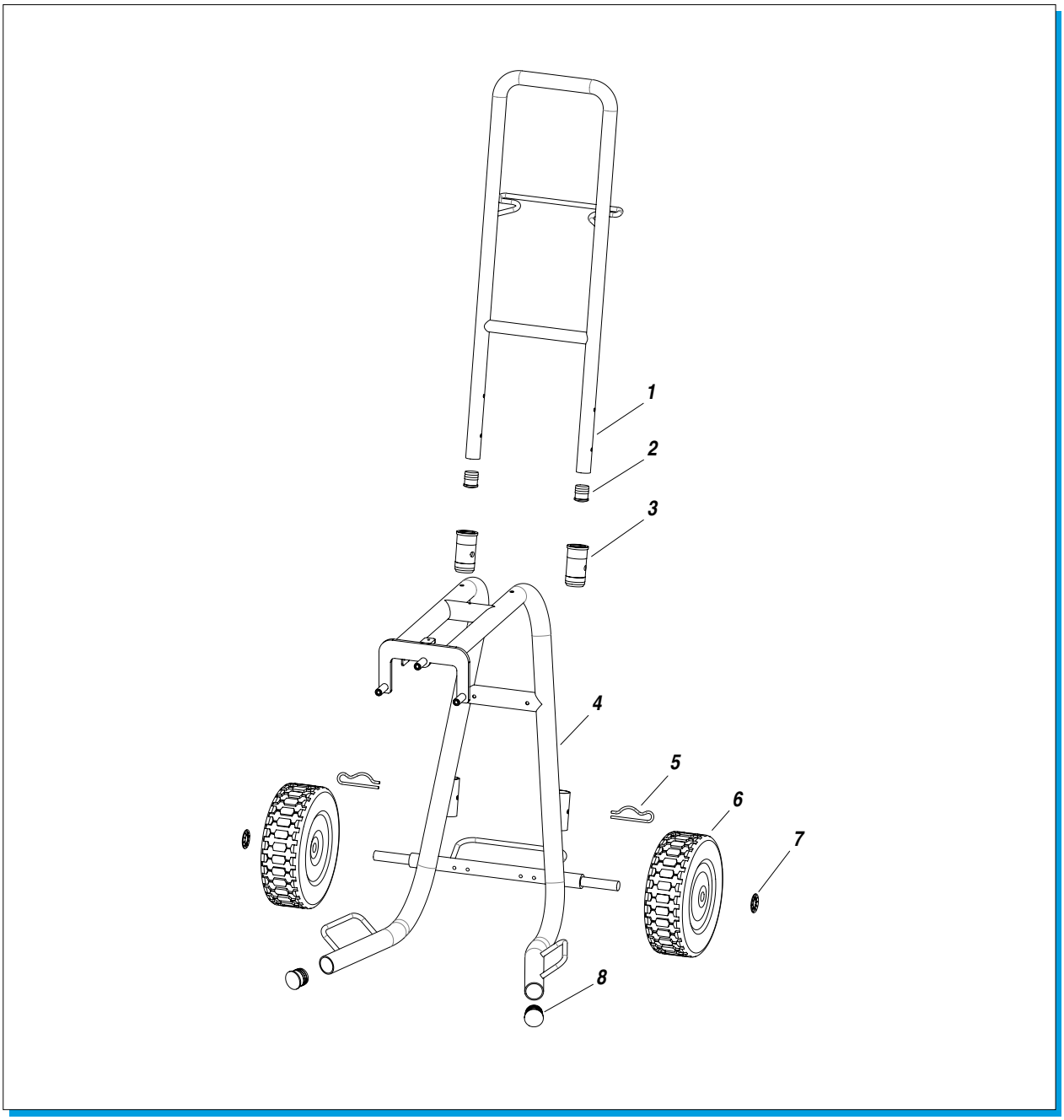
Pos.	Code	Description	Q.ty
6	8042	Nut locking UNI 7473 M6	2
7	95063	Washer UNI 6592 Ø6	4
8	20436	Screw TCE UNI 5931 M6x60	2
9	18798	Spacer	2

English

AB ASSEMBLY TROLLEY REF. 18792

VERSION ONLY TOP FINISH

WARNING: Always indicate code and quantity for each part required.



Pos.	Code	Description	Q.ty
1	30301	Handle	1
2	95159	Pipe cap Ø30	2
3	18914	Bushing for trolley handle	2
4	18791	Trolley frame	1

Pos.	Code	Description	Q.ty
5	18902	Pin Ø6	2
6	37238	Wheel Ø260	2
7	20305	Wheel washer	2
8	30304	Caps Ø40	2

English

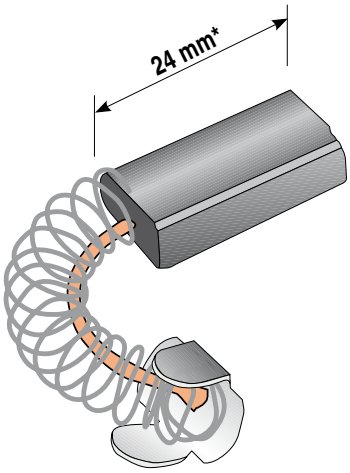
AC ELECTRIC MOTOR

WARNING: Always indicate code and quantity for each part required.

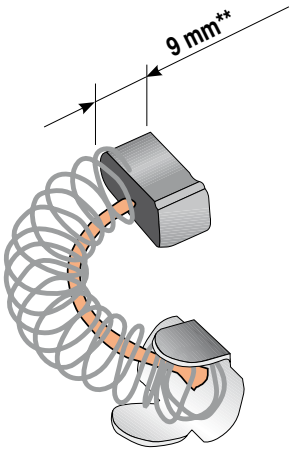
DISCONNECTTHE POWER SUPPLY BEFORE CHECKING OR REPLACING THE BRUSHES.

- Periodically check on the wear of the pinion *(at least every 1000 working hours)*.
- Periodically check the perfect connection among all the electrical components *(at least every 200 working hours)*.
- The length of the brush contact must be higher than **9 mm** to guarantee a good working of the rotary group.

Pos.	Code	Description
1	18899	Brush 220V 50Hz
2	18879	Brush 110V 60Hz
3	16047	Brush holder plug



*Length of new brush

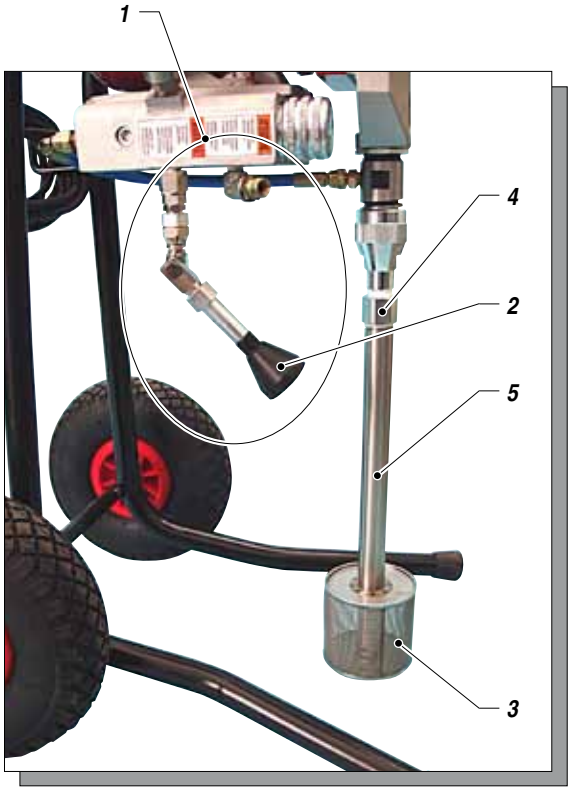


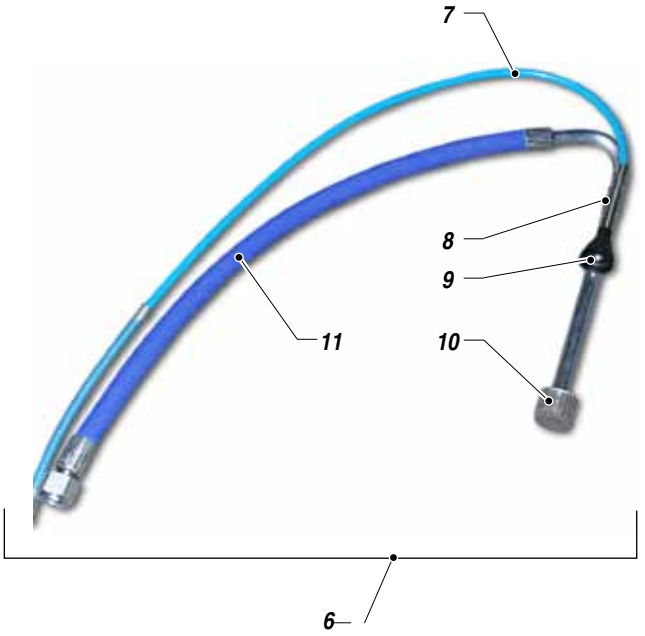
**Minimum length of the brush
Replace

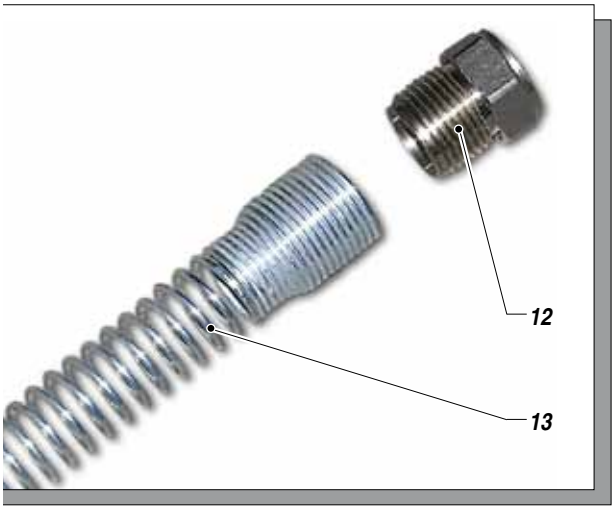
English

AD ACCESSORIES

WARNING: Always indicate code and quantity for each part required.

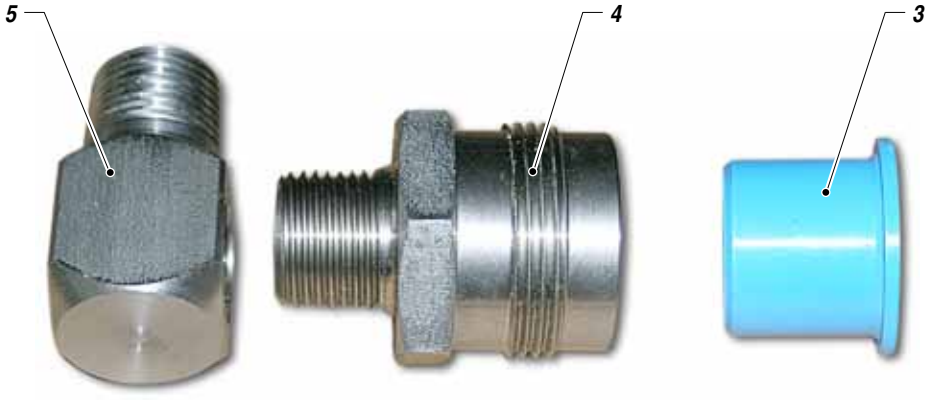






Pos.	Code	Description
1	37600	Complete jointed fitting
2	18350	Dispersion bell
3	37216	Filter
4	16602	Union
5	18182	Dip hose
6	18370	Assembly
7	18367	Recirculation pipe

Pos.	Code	Description
8	18095	Spring
9	18350	Dispersion bell
10	16802	Filter
11	18375	Flexible hose
12	18609	Nut
13	18608	Spring



Pos.	Code	Description
1	18026	Delivery compensation hose length 15 mt.
2	147	High pressure manometer M16x1,5
2	150	High pressure manometer GJ 1/4"

Pos.	Code	Description
3	96099	Intake sleeve
4	16081	Union
5	16082	Elbow

Code 11250: AT 250 1/4"+Fast Clean base
Code 11200: AT 250 M16x1,5+Fast Clean base

Art. 19975: SPRAY GUN Mist-less 09
base Mist-clean

Code 270: FILTER 100 MESH
Code 271: FILTER 60 MESH

Code 16205: FILTER 60 MESH
Code 16204: FILTER 100 MESH
Code 16203: FILTER 200 MESH

Code 85014: FILTER 40 MESH
Code 85012: FILTER 20 MESH
Code 37215: FILTER 40 MESH inox
Code 37216: FILTER 20 MESH inox

PISTON GUNSTOCK FILTERS
Code 11039: Green (30M)
Code 11038: White (60M)
Code 11037: Yellow (100M)
Code 11019: Red (200M)

ELECTRIC MIXERS:

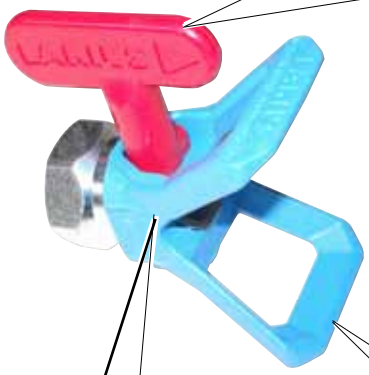
Code 217550:
MX 850 - 850W
Code 217560:
MX 1100 - 1080W
Code 217570:
MX 1100E - 1080W

ANTIPULSATIONS HOSE 1/4" - M16x1,5
max pressure 250 bar
Code 35013: 5 mt
Code 35014: 7,5 mt
Code 35017: 10 mt
Code 18026: 15 mt

HIGH PRESSURE HOSE 3/8" - M16x1,5 max pressure 425 bar
Code 18063: 7,5 mt
Code 18064: 10 mt
Code 18065: 15 mt

ANTISTATIC HOSE 3/16" - M16x1,5 max pressure 210 bar
Code 6164: 5 mt
Code 55050: 7,5 mt
Code 35018: 10 mt

TOP-SPRAYING CLEAN



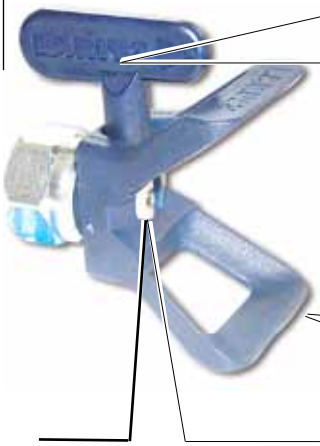
Code 18280: GASKET

TOP-SPRAYING CLEAN TIP

Nozzles code	
TSC 7-20	TSC 19-20
TSC 7-40	TSC 19-40
TSC 9-20	TSC 19-60
TSC 9-40	TSC 21-20
TSC 11-20	TSC 21-40
TSC 11-40	TSC 21-60
TSC 13-20	TSC 23-20
TSC 13-40	TSC 23-40
TSC 13-60	TSC 23-60
TSC 15-20	TSC 27-20
TSC 15-40	TSC 27-40
TSC 15-60	TSC 27-60
TSC 17-20	TSC 31-40
TSC 17-40	TSC 31-60
TSC 17-60	

Code 18270: SUPER FAST-CLEAN base UE 11/16x16

SUPER FAST-CLEAN



Code 303: GASKET

FAST-CLEAN TIP

Nozzles code		
07-20	19-60	29-80
07-40	21-20	31-40
09-20	21-40	31-60
09-40	21-60	31-80
11-20	23-20	33-40
11-40	23-40	33-60
13-20	23-60	33-80
13-40	25-20	39-40
13-60	25-40	39-60
15-20	25-60	39-80
15-40	27-20	43-40
15-60	27-40	43-60
17-20	27-60	43-80
17-40	27-80	51-40
17-60	29-20	51-60
19-20	29-40	51-80
19-40	29-60	

Code 300: FAST-CLEAN base UE 11/16x16

GUN EXTENSION
Art. 153: cm 30 -**Art. 153:** cm 40
Art. 155: cm 60 - **Art. 158:** cm 80 - **Art. 156:** cm 100

PLA 1/4”
+ BASE SUPER
FAST-CLEAN
Art. K11420-K11425-K11430: cm 130-180-240

PLA M16x1,5
+ BASE SUPER
FAST-CLEAN
Art. K11421-K11426-K11431: cm 130-180-240

Art. 16780: TELESCOPIC PAINT ROLLER
complete with:
n. 1 Roller with extra-long fiber
n. 1 Roller with long fiber
n. 1 Roller with medium fiber
Flexible hose mt. 2 3/16 " M16x1,5

Art. 40107: Complete repairing kit for pumping unit

LARIUS

PAINT SPRAYING EQUIPMENT

L'innovazione.
Quella vera.

English

AE VERSIONS

Ref. 18775: FRAME MOUNTED WITHOUT SPRAYING ACCESSORIES 230 V
Ref. 18779: FRAME MOUNTED WITHOUT SPRAYING ACCESSORIES 115 V

Ref. 18776: TROLLEY MOUNTED WITHOUT SPRAYING ACCESSORIES 230 V
Ref. 18780: TROLLEY MOUNTED WITHOUT SPRAYING ACCESSORIES 115 V

Ref. K18775: FRAME MOUNTED WITH SPRAYING ACCESSORIES 230 V
Ref. K18779: FRAME MOUNTED WITH SPRAYING ACCESSORIES 115 V

Ref. K18776: TROLLEY MOUNTED WITH SPRAYING ACCESSORIES 230 V
Ref. K18780: TROLLEY MOUNTED WITH SPRAYING ACCESSORIES 115 V

Ref. 18777: FRAME MOUNTED WITH GRAVITY HOPPER WITHOUT ACCESSORIES 230 V

Ref. 18778: TROLLEY MOUNTED WITH GRAVITY HOPPER WITHOUT ACCESSORIES 230 V

Ref. K18778: TROLLEY MOUNTED WITH GRAVITY HOPPER AND SPRAYING ACCESSORIES 230 V

AIRLESS PISTON PUMPS

NEW EXCALIBUR top finish **Rif. 18783**

JOLLY **Rif. 56501**

DRAGON **Rif. 30184**

THOR 220V/50Hz long pump unit **Rif. 20705**
THOR 220V/50Hz short pump unit **Rif. 20700**

ZEUS **Rif. K35100**

MANUFACTURER:

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Fax (39) 0341/621234

Studio Matec